

# It's All About the HiSET...

## An Interdisciplinary Approach to Preparing for the HiSET



Mini Grant

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## Rationale

**“Diamonds are nothing more than chunks of coal that stuck to its job.”**

**~Malcolm J. Forbes**



Image taken from: <http://jewelry.about.com/od/diamonds/fl/Myth-Diamonds-are-Formed-from-Cool.htm>

When I first began to think about this mini grant, I was thinking about my HiSET prep class. In my class, we do everything from an interdisciplinary approach. I cannot fathom how any student who is trying to fill gaps in their education can do so without it being interdisciplinary. Our students need to see how all the pieces of the puzzle fit together, and what better way than with showing the connections between all disciplines?

Coupled with the learning gaps that we have to fill as teachers, there is also the limited amount of time we have together. It just is not possible to complete a traditional K-12 education in adult ed, and yet, where I teach in Salem, our students make progress week to week, and more than just measuring progress, they learn to love to learn. In Salem, we have open enrollment, so there is no way that I can try to teach a multi-week lesson plan...it just does not work since I would be constantly catching people up and filling in the gaps from previous classes. In my many years now at Salem, I have experimented with a lot of different formulas for success and the one that works the best is self-contained lessons which touch upon all areas needed for the HiSET test: reading, writing, science, social studies and math. (Now I warn you, I am not a certified math teacher, so my lessons with math are a little weak, but it gets students to see that math is everywhere and not just in math class with my fellow math teacher at Salem! For this mini grant, I created a “math challenge” in which I looked

through the HiSET prep math books and found a problem that I then modified to fit the lesson plan. For example, when if I wanted to link area to an ice hockey rink, I found the area problem in the prep book, and then changed the wording to meet my needs for my lesson.) If we can get our students to see that all subjects are interconnected, then we will have been more than successful in educating the students in front of us. It amazes me each and every time we do a lesson that my students start to see how interconnected learning is and that they are actually invested in their learning. With their learning and their increasing awareness of what they know about something, courage to try, and fail, begins to take root and they become more open to taking educational risks.

That being said, I see connections everywhere! I think my favorite aspect of teaching is to take a creative look at the HiSET content and figure out ways to make connections to my students and their lives. There is the push in education now to make learning contextualized, which means that the content learned in class relates to our students' lives and because of this relationship, they are more motivated to learn. I certainly agree with this...when my lessons are geared towards their interests, they are invested in their learning. One lesson that you will find in this mini grant revolved around fights in hockey. For my young men, this was "the best class ever!" "Who knew you could watch hockey fights in school?" By taking an interdisciplinary approach, we can walk away from skill and drill (or kill sometimes) and engage our students in critical thinking. When we give our students complicated tasks and materials, grounded in clear and solid explanation, they thrive. They want to "crack the code" and figure out "why?" It is in the figuring out "why" that the deepest level of learning occurs.

For me, my lessons spring out of everyday life and everyday interactions that I connect with HiSET materials. I design my lesson backwards, meaning I find an interesting topic, peruse the HiSET books, make connections between all subjects and then I find the College and Career Readiness standard that it aligns with. (Some lessons are tougher than others, but at least every lesson I create does incorporate reading, writing, math and critical thinking. I do my best to cross all content areas, but I do not want to "force" science or social studies where it just does not fit. That would not make sense and it would stilt the lesson. The goal is to engage our learners, not confuse them or give them reason to "tune out".) Now please, do not be scared off by three little initials, CCR! It is not as imposing as it seems. When lesson plan has been designed solidly, the CCR standard(s) fit right in.

When you dig deeper into this mini grant, you will find my lessons and they are all aligned with the anchor standard only. You will have to look, if you want, to see which level your class is at; the anchor gives you a starting point and then it is broken down into levels. Level A is the lowest level and Level E is the highest level. (My students this year were in the C Level range, sometimes in the B as well as in the D.)

In working on this mini grant since January, I became intrigued with the notion of “the lesson of three”, which in education it means that students need to be exposed to something three times before they will be able to apply it and use it. What better way to get to the “three” than by making connections within the lesson rather than having it just be a disconnected lesson on topic “x”.

Who, what, when, where, why, and how? These are all questions that we ask as teachers, and ones that need to be asked, but what a better educational route to take is to get our students to ask the 5 w’s and how questions. My students come to class after a full day and they are tired...they need a class where they will be engaged in the learning. Not every topic will lend itself to amazing discovery, but when we can tap into that amazing discovery, our students get much needed energy. I keep that in mind when I am designing lessons. There needs to be just the right balance between reading, writing, thinking, talking, and self-reflection.

Well, if you are ready, I am ready. Get ready to see connections that you never dreamed possible! If you can think it, it can become a reality. (As an aside, before we go any further, just so you know, every strategy and lesson plan has been field tested by my HiSET prep students from January, 2016 through May, 2016. If it was a highly successful lesson it made its way into this mini grant. By highly successful, I mean that the students decided if it was a “keeper”. If it was not, it did not make the “cut”.) It was a daunting task to whittle down the best of the best so that they can be readily usable by all. Each lesson is generalizable enough to meet the needs of the beginning student and upper level student as well as across content areas. I hope you find a lesson or two that meets the needs of your students. (Do not feel that you need to use every aspect of my lesson. Feel free to modify, change strategies, CCR standards and so on. This is a guide for you to give you some lessons to help you with student engagement and learning. You know your students best...follow your instincts when using these lesson plans.)

## What the HiSET is All About

The HiSET is comprised of subtests in the following areas: Language Arts, Reading and Writing, Math, Science and Social Studies.

<b>Name of Test</b>	<b>Number of Questions</b>	<b>Timed in Minutes</b>	<b>Content of Test</b>	<b>Skills Needed for Test</b>
<b>Language Arts: Reading</b>	<b>40</b>	<b>65</b>	<b>Literary Texts Informational Texts</b>	<ul style="list-style-type: none"> <li>• <b>Comprehension</b></li> <li>• <b>Inference</b></li> <li>• <b>Interpretation</b></li> <li>• <b>Analysis</b></li> <li>• <b>Synthesis</b></li> <li>• <b>Generalization</b></li> </ul>
<b>Language Arts: Writing</b>	<b>51 Multiple Choice and an Essay</b>	<b>120</b>	<b>Organization of ideas Language facility Writing conventions</b>	<ul style="list-style-type: none"> <li>• <b>Development of ideas</b></li> <li>• <b>Organization of ideas</b></li> <li>• <b>Language facility</b></li> <li>• <b>Writing conventions</b></li> </ul>
<b>Math</b>	<b>50</b>	<b>90</b>	<b>Numbers and Operations on Numbers Measurement/Geometry Data analysis/Probability/Statistics Algebraic concepts</b>	<ul style="list-style-type: none"> <li>• <b>Understand mathematical concepts and procedures</b></li> <li>• <b>Analyze and interpret information</b></li> <li>• <b>Synthesize data and solve problems</b></li> </ul>
<b>Science</b>	<b>50</b>	<b>80</b>	<b>Life Science Physical Science Earth Science</b>	<ul style="list-style-type: none"> <li>• <b>Interpret and apply</b></li> <li>• <b>Analyze</b></li> <li>• <b>Evaluate and generalize</b></li> </ul>
<b>Social Studies</b>	<b>50</b>	<b>70</b>	<b>History Civics/Government Economics Geography</b>	<ul style="list-style-type: none"> <li>• <b>Interpret and apply</b></li> <li>• <b>Analyze</b></li> <li>• <b>Evaluate and generalize</b></li> </ul>

## Lesson Plan Format



Image taken from: <http://teachuae.com/are-lesson-plans-that-important/>

When doing a lesson plan that you hope will be engaging, think of the following:

What is the purpose of instruction?

What materials are needed?

How will I introduce the topic?

How will I activate prior knowledge?

How will I help my students develop critical thinking skills?

How will I model the skill being learned?

How will I guide my students and give them ample opportunity to practice the new skill?

How do I know that my students have learned the skill or content being taught?

How will I engage my students in learning?

How will I engage my students to apply what is learned in class to the real world?

How do I offer times for self-reflection?

## Lesson Plan Format

Each lesson plan will begin with this lesson plan format. Then, after this, the lesson and all of its materials will follow.

<b>College and Career Readiness Standard Anchor Standard only</b>	
<b>Purpose of instruction</b>	
<b>Activating Prior Knowledge</b>	
<b>Developing Critical Thinking Skills</b>	
<b>Materials needed</b>	
<b>Introducing the topic</b>	
<b>Modeling of skills</b>	
<b>Practicing of skills</b>	
<b>Demonstration of student learning</b>	
<b>Self-reflection</b>	
<b>Student engagement</b>	
<b>Math Challenge</b>	
<b>Application of learning to the real world</b>	

## Strategies Used

See Appendix for Directions on How to Use Them in Lesson Plans (if not explained via a website)



Image taken from: <http://www.marksanborn.com/blog/customer-service-strategies-from-the-worlds-best-brands/>

Page 192: 3-2-1

4 A's of Text Protocol ([www.nsrharmony.org/system/files/protocols/4\\_a\\_text\\_0.pdf](http://www.nsrharmony.org/system/files/protocols/4_a_text_0.pdf))

Affinity Mapping ([www.nsrharmony.org/system/files/protocols/affinity\\_mapping\\_0.pdf](http://www.nsrharmony.org/system/files/protocols/affinity_mapping_0.pdf))

Page 193: A to Z Brainstorming

Pages 194-195: Carousel Your Way through KWL

Page 196: Crystal Ball

Page 197: Cup Stacking

Page 198: Dueling Charts

Page 199: Found Poems

Page 200: Four Squares



Haiku (<http://www.wikihow.com/Write-a-Haiku-Poem>)

Hot Dog Booklets (<https://www.youtube.com/watch?v=YX5jp1hqUG4>) (This is what you need to Google, but I refer to them as mini notebooks.)

Page 201: I Do, We Do, You Do

Page 202: One Word Splash

Page 203: Sentence by Sentence Stretcher

Sentence Scrambler (<http://www.altastic.com/scramblinator/>)

Page 204: Stop and Draw

Page 205: Take a Stand

Ticket out the Door (<http://www.ideasforeducators.com/idea-blog/a-twist-on-ticket-out-the-door>)

## Tools Used

**Inferencing Checklist** (formative Assessment Tool created by HiSET students with input from teacher as a requirement for FASt project through NELRC, New England Literacy Resource Center.)

<b>Stop and Think...Did I...</b>	<b>Yes</b>	<b>No</b>	<b>Feedback</b>
Make observations based on the text?			
Make an educated guess?			
Do process of elimination?			
Draw conclusions?			
Look at the scenario in the text?			
Look at the clues in the text?			
Look at key vocabulary?			
Think about my own personal experience or my background knowledge?			
Rule out factors that would lead me off target?			
Think about what was in the text and am I familiar with the situation being presented in the text?			
Make sense in my thinking?			

**Writing Checklist** (formative Assessment Tool created by HiSET students with input from teacher as a requirement for FAST project through NELRC, New England Literacy Resource Center.)

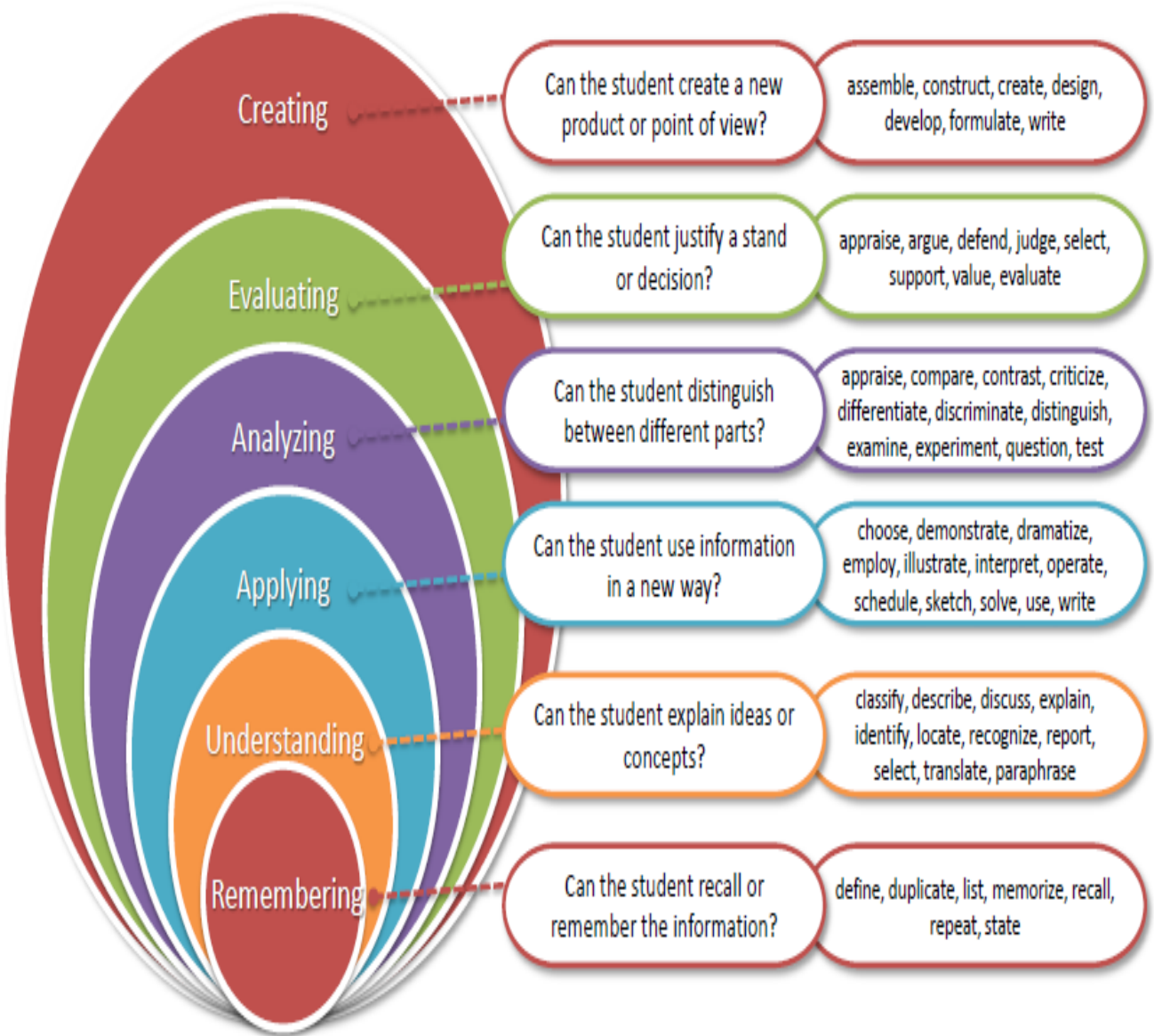
**Writing Checklist**

<b>Area that is being worked on</b>	<b>I did this</b>	<b>Not yet...still working on it</b>	<b>Feedback</b>
Opening sentence that is clear in regards to what I want to say			
Development of ideas matches my opening sentence			
Closing sentence sums up what I have been saying throughout my essay			
Tone is appropriate for my writing piece since I do not want to offend my reader			
No slang			
No texting talk			
Sentences have periods			
I kept "I" out of my essay			
I used text to support my arguments in my essay			

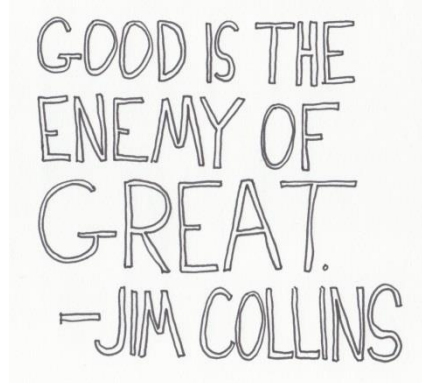
## Bloom's Taxonomy

Taken from: <http://pcs2ndgrade.pbworks.com/w/page/46897760/Revised%20Bloom's%20Taxonomy>

# Bloom's Taxonomy (Revised)



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## Lesson Plan for: Three States of Matter

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 1 (Reading): Read closely to determine what the text says explicitly and to make logical inferences from it.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To teach concepts of matter</li> <li>• To use a simple science experiment to show the different forms of matter</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Use Mind over Matter, copy provided</li> <li>• Have students hold up colored cards to denote solid, liquid, gas as a quick check on understanding. (I used red for solid, yellow for liquid, and green for gas.)</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Mind over Matter, copy provided</li> <li>• 3 States of Matter, copy provided</li> <li>• How to Blow up a Balloon with baking soda and vinegar, link: <a href="https://www.youtube.com/watch?v=uHiyVGNarg">https://www.youtube.com/watch?v=uHiyVGNarg</a></li> <li>• Understanding Chemical Reactions, link: <a href="http://www.wikihow.com/Blow-up-a-Balloon-With-Baking-Soda-and-Vinegar">http://www.wikihow.com/Blow-up-a-Balloon-With-Baking-Soda-and-Vinegar</a></li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• What do you know about chemical reactions?</li> <li>• Link: <a href="http://chemistry.about.com/od/chemicalreactions/ss/10-Examples-of-Chemical-Reactions-in-Everyday-Life.htm#showall">http://chemistry.about.com/od/chemicalreactions/ss/10-Examples-of-Chemical-Reactions-in-Everyday-Life.htm#showall</a></li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of modeling</li> <li>• Science experiment</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Political cartoon, copy provided</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Use of Four Squares</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• Copy provided</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• What materials can you <b>not</b> mix?</li> <li>• What jobs require a working knowledge of chemistry?</li> </ul>

**Mind over Matter: Decide if it is a gas, liquid, or solid. Use a red card to show solid, a yellow card to show liquid and a green card to show gas.**

1. It feels wet
2. an apple
3. its molecules are the most tightly packed.
4. a person
5. it has a definite shape
6. a table
7. air
8. it often cannot be seen, felt or smelled.
9. water
10. a computer
11. like solids, it has a definite volume.
12. paper
13. iron
14. similar to liquids, it has not shape of its own.
15. ice cream
16. wood
17. it takes the shape of its container.
18. Mars
19. Sand
20. It has no shape without a container to hold it.
21. a rock
22. the Sun
23. its molecules are least tightly packed.
24. a spider
25. it does not have a definite volume.
26. a tree
27. It spreads out to fill whatever space there is.
28. paint
29. snow
30. clouds
31. a sandwich
32. a fingernail
33. Like liquids, it has a definite volume.
34. Lettuce
35. Helium

### 3 States of Matter

#### Solids

1. Do not change shape
2. Particles are really close together
3. Particles move very slowly
4. Has fixed volumes

#### Liquids

1. Takes the shape of their containers
2. There is some space between particles
3. The particles move at a medium speed sometimes bouncing off each other
4. Has fixed volumes

#### Gases

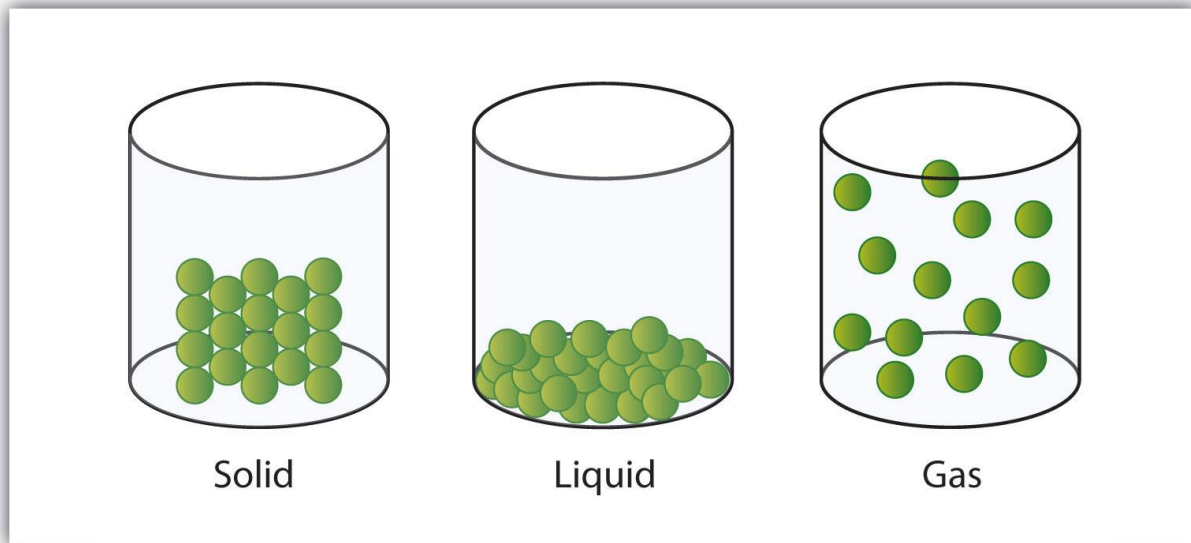
1. Hard to contain with no shape
2. Lots of space between particles
3. Particles move very slow rarely bouncing off of each other
4. Have no volume

**Illustrate what each form of matter looks like as particles contained within a box.**

<b>Solid</b>	
<b>Liquid</b>	
<b>Gas</b>	

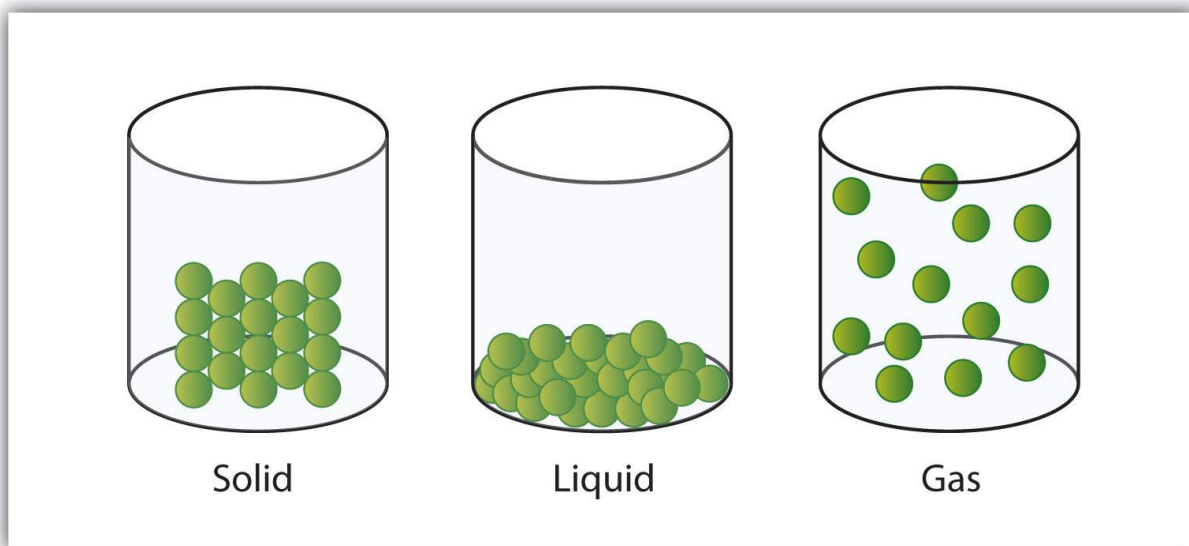


States of Matter and Particle Spacing



1. Based on the diagram, the spacing between particles is generally
  - A smallest in gases
  - B largest in liquids
  - C smallest in solids
  - D constant across all states

**States of Matter and Particle Spacing**



1. Based on the diagram, the spacing between particles is generally

- A smallest in gases
- B largest in liquids
- C smallest in solids
- D constant across all states

C is the correct answer because the diagram shows that the particles in solids are closer together than those in liquid or gases.

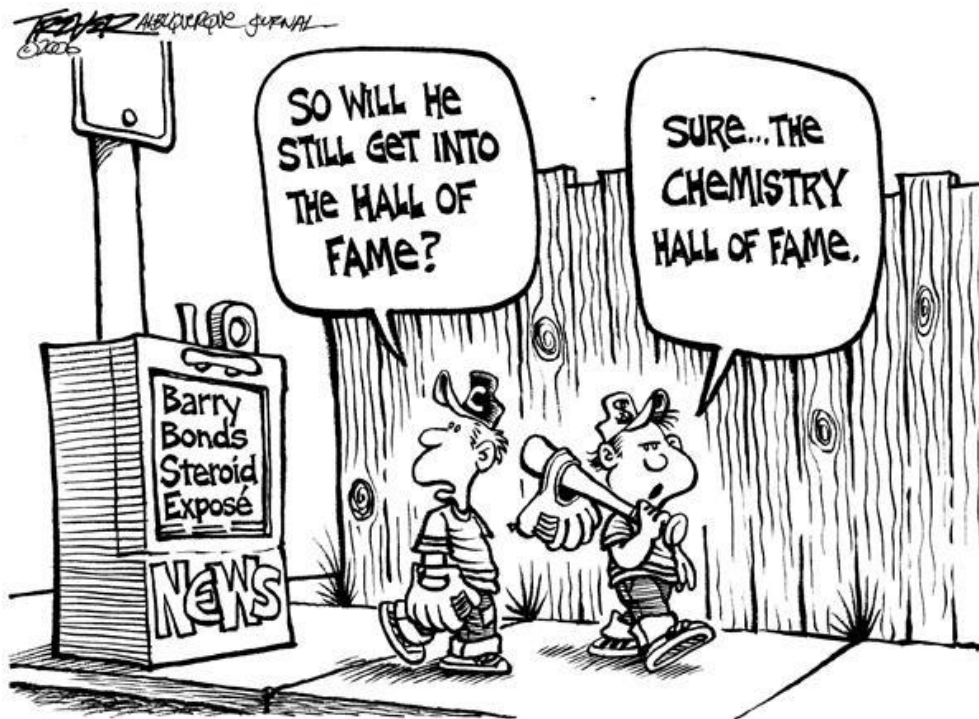
Self-reflection: Political Cartoon

What does this cartoon mean?

Should athletes be banned from their specific Hall of Fame due to steroid use?

Would you ever use steroids? Why or why not?

How are they dangerous to a person?



Taken from: <http://www.cagle.com/2006/03/hall-of-fame/>

**Math Challenge**

**Taken from: High School Equivalency Test Preparation: Mathematics, Student Edition**

Page 201, question 20

**Cindy purchased 3 gallons of vinegar to conduct her balloon experiment. Her total was more than \$9. What was the lowest possible price of 1 gallon of vinegar?**

- A**     \$2.00
- B**     \$2.50
- C**     \$3.01
- D**     \$3.50
- E**     \$4.00

\*\*\*\*\*

**Math Challenge**

**Answer Key**

**Taken from: High School Equivalency Test Preparation: Mathematics, Student Edition**

Page 201, question 20

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C is correct because you want to solve  $3g > 9$  for  $g$  to find  $g > 3$ , so the lowest price is \$3.01 per gallon.

## Lesson Plan for: 10 Things Americans Waste Money On

<b>College and Career Readiness Standard Anchor Standard only</b>	<ul style="list-style-type: none"> <li>• CCR Anchor 1 (Reading): Read closely to determine what the text says explicitly and to make logical inferences from it.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 6 (Writing): Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<b>Purpose of instruction</b>	<ul style="list-style-type: none"> <li>• To teach concepts related to needs and wants and how that is related to a budget and salaries.</li> </ul>
<b>Activating Prior Knowledge</b>	<ul style="list-style-type: none"> <li>• Complete chart of needs and wants</li> <li>• Evaluate the difference between needs and wants</li> </ul>
<b>Developing Critical Thinking Skills</b>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<b>Materials needed</b>	<ul style="list-style-type: none"> <li>• Chart of needs and wants, copy provided</li> <li>• 10 Things Americans Waste Money On, copy provided</li> <li>• Inferencing checklist, located in appendix</li> <li>• Essay on deciding what is a need or a want</li> <li>• Calculate the Income, copy provided</li> </ul>
<b>Introducing the topic</b>	<ul style="list-style-type: none"> <li>• We all need money to live. Why?</li> </ul>
<b>Modeling of skills</b>	<ul style="list-style-type: none"> <li>• Embedded within lesson</li> </ul>
<b>Practicing of skills</b>	<ul style="list-style-type: none"> <li>• Sentence by sentence stretcher</li> <li>• Creating a budget</li> </ul>
<b>Demonstration of student learning</b>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<b>Self-reflection</b>	<ul style="list-style-type: none"> <li>• Free write: how much money do I need to live comfortably? What are my goals after HiSET?</li> </ul>
<b>Student engagement</b>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<b>Math Challenge</b>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<b>Application of learning to the real world</b>	<ul style="list-style-type: none"> <li>• Research of current jobs for high school graduates and the salary.</li> </ul>

## Needs and Wants

A **need** is something that must be met in order to survive, such as food.

A **want** is just that-something that is nice but not necessary.

**Complete the chart and then classify your thoughts as needs and wants.**

Need	Want

**Do you need to make any changes?**

**Share your list with someone.**

**Compare your list with theirs.**

**Do you need to make any changes?**

## 10 Things Americans Waste Money On



Image taken from: <http://www.today.com/series/starttoday/how-save-money-start-your-financial-savings-plan-these-18-167301>

We don't think much about our daily money-wasters . . . but we need to. There are so many places in our daily routine where money can be wasted without us knowing it. It's ridiculous enough to make a list over—so we did. Here are 10 things we waste money on in America today:

### 1. Credit card interest

The only thing stupider than buying something you can't afford is buying something you can't afford at **(insert huge interest rate here)**. You don't get jack for the extra money you fork over.

### 2. Deal websites

Hey, remember that time we bought a laser hair-removal deal for 78% off from that startup place all the way across town and used it for the full amount and within the specified time limit? **Neither do we.**

### 3. Appetizers

Restaurants already have lunch and dinner portions so big you need a box to bring home the leftovers. Why pay an extra six bucks to get something that will take up more room in your stomach before the main meal is even brought out?

### 4. ATM fees

When we use a bank that is not ours, it charges us. Then our bank charges us again. Don't think that it's just two bucks here or \$3 there. **It adds up**, and don't even get us started on the overdraft fees that could result from bounced checks. Speaking of which . . .

## 5. Overdraft fees

For these, **there's just no excuse**. If you add correctly and spend less than you make, you'll never pay a dime of overdraft fees. Fees result from sloppiness, pure and simple.

## 6. Speedy shipping

Seriously? Do we think that book or those clothes we ordered online are so important that we can't wait four to 14 days for a package to arrive? With priority shipping, **the only thing that moves faster than the package toward you is your money—away from you**.

## 7. Designer baby clothes

Also known as “glorified stain gatherers.” Why do we spend \$20 on a “Feed me or no one sleeps” T-shirt that is three ticks away from being covered with breakfast? On top of that, they'll wear it **two or three times** before either outgrowing it or the season changing.

## 8. Unused gym memberships

How is it that so many people join a health club around the New Year's Day resolving to lose weight and there are so many empty treadmills come January 15? Unlike the commitment, **the monthly dues don't stop**. Besides, you can run around the block for free.

## 9. Premium cable packages

Not only do we not watch 90% of the channels that are on, but with so many “reality” shows and specialized stations, TV as a concept is about as rich as a person who lives paycheck to paycheck.

## 10. Daily coffee trips

Back before coffee shops started popping up on every street corner, people brewed it themselves. **We as a culture seem to have gotten away from that**. And you don't need the caffeine to get your heart thumping—just take a look at how much money you dish out for that sugary concoction over a month or two.

Take a look at your own budget and see where your cash might be getting away from you. It can happen easier than you think. **Most often, it does**.

Taken from: [http://www.daveramsey.com/blog/10-things-americans-waste-money-on?et\\_cid=2802924&et rid=0&linkid=](http://www.daveramsey.com/blog/10-things-americans-waste-money-on?et_cid=2802924&et rid=0&linkid=)



**Essay: is it a need or a want?** Sometimes it takes a lot of thinking and mature decision making to decide what is a need and what is a want. Based on the information in this chart, taken from **Social Studies for the HiSET Test, Economic Basics, New Readers Press, 2016**, what do you think about the concept of needs and wants?

**Median Weekly Pay by Education Level, 2014**

	<b>Men</b>	<b>Women</b>
<b>Less than high school</b>	<b>\$517</b>	<b>\$409</b>
<b>High school graduate, no college</b>	<b>\$751</b>	<b>\$578</b>
<b>Some college or associate degree</b>	<b>\$872</b>	<b>\$661</b>
<b>Bachelor's degree</b>	<b>\$1249</b>	<b>\$965</b>

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## Median Weekly Pay by Education Level, 2014

### Calculate the Income

	Men	Women
Less than high school	\$517	\$409
High school graduate, no college	\$751	\$578
Some college or associate degree	\$872	\$661
Bachelor's degree	\$1249	\$965

How much money does a man make versus a woman in each category?

How much money does a man make per month for each category?

How much money does a woman make per month for each category?

How much money does a man make per year for each category?

How much money does a woman make per year for each category?

**Math Challenge**

**High School Equivalency Test Preparation: Mathematics**

Paxen, 2014

Page 44, question 13

**Ezra invested \$3,000 for 18 months at 3% interest. How much interest will he earn on his investment?**

- A**     \$90
- B**     \$135
- C**     \$180
- D**     \$900
- E**     \$1350

\*\*\*\*\*

**Math Challenge**

**Answer Key**

**High School Equivalency Test Preparation: Mathematics**

Paxen, 2014

Page 44, question 13

**Ezra invested \$3,000 for 18 months at 3% interest. How much interest will he earn on his investment?**

- A**     \$90
- B**     \$135
- C**     \$180
- D**     \$900
- E**     \$1350

B is the correct answer. Use the formula:  $I = prt$ . Ezra will pay  $3,000 \times 0.03 \times 1.5 = \$135$  interest.

## Lesson Plan for: Are Your Jeans Sagging? If So, Go Directly to Jail

<p><b>College and Career Readiness Standard Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 5 (Writing): Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about the issue of sagging jeans and if it is breaking the law and what the Constitution says about fair trials.</li> <li>• To learn about the time period of Zoot Suits and to make connections with today's culture</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• A-Z brainstorming about the criminal justice system</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Are Your Jeans Sagging?, copy provided</li> <li>• Zoot Suit Lyrics, copy provided</li> <li>• Listen to song, <a href="https://www.youtube.com/watch?v=1lqH3uliwJY">https://www.youtube.com/watch?v=1lqH3uliwJY</a></li> <li>• Significance of song lyrics, copy provided</li> <li>• Link to explore the Zoot Suit Riots further: <a href="http://www.britannica.com/event/Zoot-Suit-Riots">http://www.britannica.com/event/Zoot-Suit-Riots</a></li> <li>• Essay on sagging jeans</li> <li>• Writing checklist</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Pose the question: what do you know about the criminal justice system?</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of modeling</li> <li>• Dueling charts</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Free write on your feelings in regards to this topic</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Political Cartoon, copy provided</li> </ul>

## Are Your Jeans Sagging? Go Directly to Jail.

By NIKO KOPPEL  
Published: August 30, 2007

**TESTING BOUNDARIES** Examples of saggy pants in different parts of the nation.



**BOXER REBELLION** The saggy style is in full view in the East Village.



Mei-Chun Jau/Dallas Morning News  
Associated Press



Hiroko Masuike for  
The New York Times

JAMARCUS MARSHALL, a 17-year-old high school sophomore in Mansfield, La., believes that no one should be able to tell him how low to wear his jeans. "It's up to the person who's wearing the pants," he said. Some communities have outlawed this style of dress.

The reaction reminds some of the outrage engendered by zoot suit styles during the 1940s. Mr. Marshall's sagging pants, a style popularized in the early 1990s by hip-hop artists, are becoming a criminal offense in a growing number of communities, including his own.

Starting in Louisiana, an intensifying push by lawmakers has determined pants worn low enough to expose underwear poses a threat to the public, and they have enacted indecency ordinances to stop it.

Since June 11, sagging pants have been against the law in Delcambre, La., a town of 2,231 that is 80 miles southwest of Baton Rouge. The style carries a fine of as much as \$500 or up to a six-month sentence. "We used to wear long hair, but I don't think our trends were ever as bad as sagging," said Mayor Carol Broussard.

An ordinance in Mansfield, a town of 5,496 near Shreveport, subjects offenders to a fine (as much as \$150 plus court costs) or jail time (up to 15 days). Police Chief Don English said the law, which takes effect Sept. 15, will set a good civic image.

Behind the indecency laws may be the real issue — the hip-hop style itself, which critics say is worn as a badge of delinquency, with its distinctive walk conveying thuggish swagger and a disrespect for authority. Also at work is the larger issue of freedom of expression and the questions raised when fashion moves from being merely objectionable to illegal.

Sagging began in prison, where oversized uniforms were issued without belts to prevent suicide and their use as weapons. The style spread through rappers and music videos, from the ghetto to the suburbs and around the world.

Efforts to outlaw sagging in Virginia and statewide in Louisiana in 2004, failed, usually when opponents invoked a right to self-expression. But the latest legislative efforts have taken a different tack, drawing on indecency laws, and their success is inspiring lawmakers in other states.

In the West Ward of Trenton, Councilwoman Annette Lartigue is drafting an ordinance to fine or enforce community service in response to what she sees as the problem of exposing private parts in public.

"It's a fad like hot pants; however, I think it crosses the line when a person shows their backside," Ms. Lartigue said. "You can't legislate how people dress, but you can legislate when people begin to become indecent by exposing their body parts."

The [American Civil Liberties Union](#) has been steadfast in its opposition to dress restrictions. Debbie Seagraves, the executive director of the A.C.L.U. of Georgia said, "I don't see any way that something constitutional could be crafted when the intention is to single out and label one style of dress that originated with the black youth culture, as an unacceptable form of expression."

School districts have become more aggressive in enforcing dress bans, as the courts have given them greater latitude. Restrictions have been devised for jeans, miniskirts, long hair, piercing, logos with drug references and gang-affiliated clothing including colors, hats and jewelry.

Dress codes are showing up in unexpected places. The National Basketball Association now stipulates that no sports apparel, sunglasses, headgear, exposed chains or medallions may be worn at league-sponsored events. After experiencing a brawl that spilled into the stands and generated publicity headaches, the league sought to enforce a business-casual dress code, saying that hip-hop clothing projected an image that alienated middle-class audiences.

According to Andrew Bolton, the curator at the [Costume Institute](#) of the [Metropolitan Museum of Art](#), fashions tend to be decried when they "challenge the conservative morality of a society."

Not since the zoot suit has a style been greeted with such strong disapproval. The exaggerated boxy long coat and tight-cuffed pants, started in the 1930s, was the emblematic style of a subculture of young urban minorities. It was viewed as unpatriotic and flouted a fabric conservation order during World War II. The clothing was at the center of what were called Zoot Suit Riots in Los Angeles, racially motivated beatings of Hispanic youths by sailors. The youths were stripped of their garments, which were burned in the street.

Following a pattern of past fashion bans, the sagging prohibitions are seen by some as racially motivated because the wearers are young, predominantly African-American men.

Yet, this legislation has been proposed largely by African-American officials. It may speak to a generation gap. Michael Eric Dyson, a professor of sociology at [Georgetown University](#) and the author of "Know What I Mean?: Reflections on Hip Hop," said, "They've bought the myth that sagging pants represents an offensive lifestyle which leads to destructive behavior."

Last week, Atlanta Councilman C. T. Martin sponsored an amendment to the city's indecency laws to ban sagging, which he called an epidemic. "We are trying to craft a remedy," said Mr. Martin, who sees the problem as "a prison mentality."

But Larry Harris, Jr., 28, a musician from Miami, who stood in oversize gear outside a hip-hop show in Times Square, denied that prison style was his inspiration. "I think what you have here is people who don't understand the language of hip-hop," he said.

A dress code ordinance proposed in Stratford, Conn., by Councilman Alvin O'Neal was rejected at a Town Council meeting last Monday, drawing criticism that the law was unconstitutional and unjustly encouraged racial profiling. Many residents agreed that the town had more pressing issues.

Benjamin Chavis, the former executive director of the [N.A.A.C.P.](#), said, "I think to criminalize how a person wears their clothing is more offensive than what the remedy is trying to do." Dr. Chavis, who is often pictured in an impeccable suit and tie among the baggy outfits of the hip-hop elite, is a chairman of the Hip Hop Summit Action Network, a coalition he founded with the music mogul [Russell Simmons](#). He said that the coalition will challenge the ordinances in court.

"The focus should be on cleaning up the social conditions that the sagging pants comes out of," he said. "That they wear their pants the way they do is a statement of the reality that they're struggling with on a day-to-day basis."

Taken from: <http://www.nytimes.com/2007/08/30/fashion/30baggy.html>



Copyright by Steve Kelley.

### Reading Comprehension Questions

1. Wearing saggy pants is a symbol of the \_\_\_\_\_ style of music.
  - a. Reggae
  - b. Classical
  - c. Hip hop
  - d. Jazz
  
2. Some towns have passed laws about sagging pants. An offender can receive a fine or \_\_\_\_\_.
  - a. Incarceration
  - b. Incineration
  - c. Injustice
  - d. Inhumane
  
3. Hip hop clothing alienates the \_\_\_\_\_ class.
  - a. Poor
  - b. Lower
  - c. Middle
  - d. Upper
  
4. Sagging pants prohibitions are seen as \_\_\_\_\_ motivated.
  - a. Racially
  - b. Financially
  - c. Ethically
  - d. Professionally
  
5. Sagging pants originated in \_\_\_\_\_ to prevent suicide.
  - a. Schools
  - b. Monasteries
  - c. Hospitals
  - d. Jails



## Reading Comprehension Questions

### Answer Key

1. Wearing saggy pants is a symbol of the \_\_\_\_\_ style of music.
  - a. Reggae
  - b. Classical
  - c. Hip hop
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## Zoot Suits



Bettman/Corbis

### **Zoot Suit Riot - Cherry Poppin Daddies** **Song Lyrics, Chart History, Artist Information**

- As performed by the Cherry Poppin' Daddies
- A revival swing hit from 1998
- The song hit #12 on the Top 40 charts
- The song was inspired by a renowned 1943 incident when white servicemen entered Los Angeles' ghettos in mobs to attack zoot suit wearing Hispanics

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### **Zoot Suit Riot - Song Lyrics**

Who's that whisperin' in the trees?  
It's two sailors and they're on leave  
Pipes and chains and swingin' hands  
Who's your daddy, yes I am

Fat cat came to play now he can't run fast enough  
You had best stay away when the pushers come to shove

Zoot suit riot, (Riot)  
Throw back a bottle of beer  
Zoot suit riot (Riot)  
Pull a comb through your coal black hair  
Zoot suit riot, (Riot)  
Throw back a bottle of beer  
Zoot suit riot (Riot)  
Pull a comb through your coal black hair  
Blow Daddy

A whipped up jitterbuggin' brown eyed man  
A stray cat frontin' up an eight-piece band  
Cut me Sammy and you'll understand

In my veins hot music ran

You got me in a sway, and I want to swing you done  
Now you sailors know, where your women come for love

Zoot suit riot, (Riot)  
Throw back a bottle of beer  
Zoot suit riot (Riot)  
Pull a comb through your coal black hair  
Zoot suit riot, (Riot)  
Throw back a bottle of beer  
Zoot suit riot (Riot)  
Pull a comb through your coal black hair

You're in a Zoot Suit riot

Zoot zy-ow - Zoot za zoo zay  
Hey al-oo-ay-en - zay zay zay  
Zoot zy-ay-ay ow - Zoot za zoo zay  
Ze-zoo-ze-zehoo - day de day

You got me in a sway, and I want to swing you done  
Now you sailors know, where your women come for love

Zoot suit riot, (Riot)  
Throw back a bottle of beer  
Zoot suit riot (Riot)  
Pull a comb through your coal black hair  
Zoot suit riot, (Riot)  
Throw back a bottle of beer  
Zoot suit riot (Riot)  
Pull a comb through your coal black hair

You're in a zoot suit riot

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Note that the lyrics posted here are those as interpreted and performed by **The Oracle Band**. In a **few** cases we have taken some liberties with the lyrics to make them more appropriate for tasteful gatherings. Their use here is intended as an aid for people in selecting music for their wedding reception or private party, and may not be reproduced for any commercial, for-profit use.



From the Bill of Rights of the U.S. Constitution

Amendment VI

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

- 6. Which of the following provides the best title for the content of Amendment VI?**
- A** freedom of expression
  - B** rights of the accused
  - C** procedures for jury trials
  - D** witnesses in criminal proceedings

**HiSET Social Studies, Interpret the Constitution, page 142, question 6**

**High School Equivalency Test Preparation**

**Answer Key**

**Paxen, 2014**

From the Bill of Rights of the U.S. Constitution

Amendment VI

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**6. Which of the following provides the best title for the content of Amendment VI?**

- A** freedom of expression
- B** rights of the accused
- C** procedures for jury trials
- D** witnesses in criminal proceedings

The correct answer is B because the amendment deals with the rights of the accused. It states that the accused has the right to a speedy and public trial, to an impartial jury, to be confronted by witnesses against him, and to have the assistance of counsel.

**Math Challenge, High School Equivalency Test Preparation, Student Edition**

Paxen, 2014, Page 3, question 7

**Colin is packing his car with three pieces of luggage. He needs to continually stop what he is doing to keep his pants from falling down. He packs the heaviest piece into the car first, then the next heaviest, and finally, the lightest piece on top. The weights of the three pieces of luggage are 25.57 pounds, 24.30 pounds, and 25.98 pounds. According to the weights, in which order will he pack the luggage into his car?**

- A** 24.30 pounds, 25.57 pounds, 25.98 pounds
- B** 25.98 pounds, 24.30 pounds, 25.57 pounds
- C** 25.98 pounds, 25.57 pounds, 24.30 pounds
- D** 25.57 pounds , 25.98 pounds, 24.30 pounds
- E** 25.98 pounds, 25.57 pounds, 24.30 pounds

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**Math Challenge Answer Key, High School Equivalency Test Preparation, Student Edition**

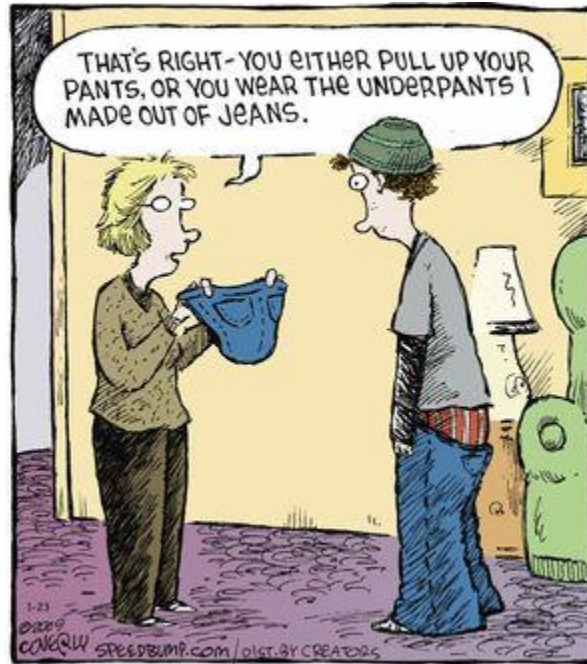
Paxen, 2014, Page 3, question 7

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- B** 25.98 pounds, 24.30 pounds, 25.57 pounds
- C** 25.98 pounds, 25.57 pounds, 24.30 pounds
- D** 25.57 pounds , 25.98 pounds, 24.30 pounds
- E** 25.98 pounds, 25.57 pounds , 24.30 pounds

C is the correct answer because the two greatest numbers are 25.98 and 25.57 because they both have 5 ones. 25.98 has 9 tenths, while 25.57 only has 5 tenths, so 25.98 is greatest. 24.30 is the least.

## Self-Reflection



Put yourself in the picture as the Mom. What are you saying?

Put yourself in the picture as the son. What are you saying?

Imagine that the son's boss or teacher is in the picture. What would their expressions be?



## Lesson Plan Format for: Barbie Makes Her Debut

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about Barbie and her role in shaping a person's image about their body.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Watch this video, "Barbie if She Looked Like a Real Woman": <a href="https://www.youtube.com/watch?v=5T0uem0izP4">https://www.youtube.com/watch?v=5T0uem0izP4</a></li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Debut of Barbie, copy provided</li> <li>• Political cartoon, copy provided</li> <li>• Essay: Barbie and Body Image, copy provided</li> <li>• Inferencing Checklist</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Pre-reading questions, copy provided</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• 3-2-1 strategy</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• Free write about body image</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Political cartoon, copy provided</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Watch the video: <a href="https://www.youtube.com/watch?v=W2_FF1paBew">https://www.youtube.com/watch?v=W2_FF1paBew</a></li> <li>• Would this be a job that you would like? Why or why not? Use the Inferencing Checklist</li> </ul>

## Barbie Makes her Debut



Image taken from: <http://science-all.com/wallpapers/barbie-doll.html>

### Pre-reading Questions

1. What do you know about Barbie?
2. What is your first memory of Barbie?
3. What is the fascination with Barbie?
4. Is she a good role model for young women?
5. At what age should children stop playing with Barbie?

On March 9, 1959, the first Barbie doll goes on display at the American Toy Fair in New York City. Eleven inches tall, with a waterfall of blond hair, Barbie was the first mass-produced toy doll in the United States with adult features. The woman behind Barbie was Ruth Handler, who co-founded Mattel, Inc. with her husband in 1945. After seeing her young daughter ignore her baby dolls to play make-believe with paper dolls of adult women, Handler realized there was an important niche in the market for a toy that allowed little girls to imagine the future.

Barbie's appearance was modeled on a doll named Lilli, based on a German comic strip character. Originally marketed as a racy gag gift to adult men in tobacco shops, the Lilli doll later became extremely popular with children. Mattel bought the rights to Lilli and made its own version, which Handler named after her daughter, Barbara. With its sponsorship of the "Mickey Mouse Club" TV program in 1955, Mattel became the first toy company to broadcast commercials to children. They used this medium to promote their new toy, and by 1961, the enormous consumer demand for the doll led Mattel to release a boyfriend for Barbie. Handler named him Ken, after her son. Barbie's best friend, Midge, came out in 1963; her little sister, Skipper, debuted the following year.

Over the years, Barbie generated huge sales—and a lot of controversy. On the positive side, many women saw Barbie as providing an alternative to traditional 1950s gender roles. She has had a series of different jobs, from airline stewardess, doctor, pilot and astronaut to Olympic athlete and even U.S. presidential candidate. Others thought Barbie's never-ending supply of designer outfits, cars and "Dream Houses" encouraged kids to be materialistic. It was Barbie's appearance that caused the most controversy, however. Her tiny waist and enormous breasts—it was estimated that if she were a real woman, her measurements would be 36-18-38—led many to claim that Barbie provided little girls with an unrealistic and harmful example and fostered negative body image.

Despite the criticism, sales of Barbie-related merchandise continued to soar, topping 1 billion dollars annually by 1993. Since 1959, more than 800 million dolls in the Barbie family have been sold around the world and Barbie is now a bona fide global icon.

Taken from: <http://www.history.com/this-day-in-history/barbie-makes-her-debut>

### **Main Idea:**

### **Supporting Details**

## Political Cartoon: Barbie Turns 50!



When looking at this political cartoon, what are you thinking about?

What are the ramifications for Barbie?

For Ken?

For Skipper?

Is this a realistic view of what it means to turn 50? Why or why not?



You might be wondering about the connection between Barbie and body image. Well, the average American girl between the ages of three to 11 owns ten Barbie dolls. The average American girl grows up surrounded by the Barbie body image. The effects of Barbie and body image run deeper than you might imagine.

### **The Barbie Body Image**

If the traditional Barbie doll was a real woman, she would be 5'9" and weigh 120 pounds. Her body fat percentage would be so low that she would not be able to menstruate. Her measurements would be 38-18-34. The average woman's measurements, on the other hand, are about 41-34-43. In the book "Ken and Barbie at Life Size," author Kevin Norton states that only about one in 100,000 women actually match the Barbie body image.

### **Barbie and Body Image**

We frequently give young children toys designed to allow them to practice for roles they will take on as adults. That's why we have housekeeping toys, toy doctor kits, toy pots and pans, baby dolls and so on. Through play, children learn about the world and their place in it.

One woman, Cindy Jackson, was so heavily influenced by Barbie that she underwent 20 plastic surgeries (to the tune of \$55,000) in an attempt to make herself look just like the Barbie body image. Not everyone is influenced to such an extreme degree, but children are influenced by the toys they play with. One study showed that girls who played with Barbie reported lower body image and a greater desire to be thinner than the girls who played with a curvier doll or no doll at all.

So what do Barbie dolls teach children about the world? They teach children that it is desirable to be thin, white, and blonde. They may encourage children to strive for an unrealistic body image.

### **Eating Disorders, Barbie and Body Image**

The Alliance for Eating Disorders Awareness reports that 70 million people worldwide suffer from eating disorders like anorexia and bulimia. About 90 percent of those with eating disorders are young women between the ages of 12 and 25. Remember, these young women likely played with Barbie dolls, multiple Barbie dolls, shortly before developing their disorders.

An unrealistic idea about the way we should look or what we should weigh is not the only thing that causes eating disorders and in fact, eating disorders are complex conditions that probably have numerous contributing factors. Still, we know that the toys children play with influence their later behavior.

### **The New Barbie Dolls**

Mattel, the toy company that makes Barbie, announced that in 2016 it would begin introducing new dolls with diverse body types, including, tall, petite and curvy dolls. Company spokesperson Michelle Chidoni explained that the new dolls will be “a better reflection of what girls see in the world around them.” Not only will they better represent the diversity seen in real women, they may also help girls develop a more realistic body image.

In 2015, Mattel introduced dolls with different skin tones and hair colors, and together with the new body shapes and sizes, girls will be better able to choose dolls that look like them and like the role models in their lives. Says Evelyn Mazzocco, Senior Vice President at Mattel, “We believe we have a responsibility to girls and parents to reflect a broader view of beauty.”

### **Coping with Barbie and Body Image Issues**

Parents should make informed decisions about which toys they give to their children and consider carefully how those toys might affect them. The new Barbie dolls offer increased options for parents. Parents can introduce their children to a range of body shapes, sizes, and colors through these new dolls.

Parents can choose to give their children dolls that do not promote an unrealistic or even unhealthy body image, such as the new Barbies offered by Mattel. Parents can give their children toys other than dolls. Parents can also discuss the messages toys convey with their children. Even young children can begin to develop a critical eye towards these things if provided with some guidance in that direction.

Taken from and modified: <http://www.mirror-mirror.org/barbie-and-body-image.htm>



**Dress for Success**

(A)

(1) When you are going on a job interview, your appearance matters. (2) The saying is true: "You never get a second chance to make a first impression." (3) The next time you are unsure about what to wear, consider these tips:

(B)

(4) Wear clothes that are simple and conservative. (5) You want to match the environment of the workplace. (6) If others will be wearing suits, then you should wear a suit. (7) If others will be wearing dress shoes, then wear dress shoes. (8) A clean, neat appearance tells people that you care about yourself and others around you.

(C)

(9) Your hair and fingernails should be clean and neat. (10) Choose a simple hairstyle that is flattering to your face. (11) Clean, well-groomed hands suggest attention to detail. (12) Women should avoid bright or unusual nail polish colors. (13) Instead, choose something pretty and subtle.

(D)

(14) When choosing accessories, understatement is the key. (15) Do not wear too much jewelry, cologne, or perfume. (16) Too much jewelry can look gaudy. (17) Too much scent may cause discomfort to those around you. (18) Do not chew gum or suck on mints, but make sure that your mouth is clean and your breath fresh. (19) A winning smile will attract others to you.

2. Sentence 6: If others will be wearing suits, then you should wear a suit.

Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.

- A If others
- B For example, if others
- C Although, if others
- D Afterward, if others



**3. Sentence 12: Women should avoid bright or unusual nail polish colors.**

**Which of the following is the most effective revision of sentence 12?**

- A**     **First, women should avoid bright or unusual nail polish colors.**
- B**     **Conversely, women should avoid bright or unusual nail polish colors.**
- C**     **Finally, women should avoid bright or unusual nail polish colors.**
- D**     **However, women should avoid bright or unusual nail polish colors.**

**4. Sentence 17: Too much scent may cause discomfort to those around you.**

**Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.**

- A**     **Too much**
- B**     **After that, too much**
- C**     **Yet too much**
- D**     **Likewise, too much**

Answer Key

High School Equivalency Test Preparation

Paxen, 2014

Dress for Success

(A)

(1) When you are going on a job interview, your appearance matters. (2) The saying is true: "You never get a second chance to make a first impression." (3) The next time you are unsure about what to wear, consider these tips:

(B)

(4) Wear clothes that are simple and conservative. (5) You want to match the environment of the workplace. (6) If others will be wearing suits, then you should wear a suit. (7) If others will be wearing dress shoes, then wear dress shoes. (8) A clean, neat appearance tells people that you care about yourself and others around you.

(C)

(9) Your hair and fingernails should be clean and neat. (10) Choose a simple hairstyle that is flattering to your face. (11) Clean, well-groomed hands suggest attention to detail. (12) Women should avoid bright or unusual nail polish colors. (13) Instead, choose something pretty and subtle.

(D)

(14) When choosing accessories, understatement is the key. (15) Do not wear too much jewelry, cologne, or perfume. (16) Too much jewelry can look gaudy. (17) Too much scent may cause discomfort to those around you. (18) Do not chew gum or suck on mints, but make sure that your mouth is clean and your breath fresh. (19) A winning smile will attract others to you.

2. Sentence 6: If others will be wearing suits, then you should wear a suit.

Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.

A If others

B For example, if others

**C** Although, if others

**D** Afterward, if others

**B** is the correct answer, since “for example” should be added to the beginning of sentence 6 because it uses a transition to connect ideas with examples.

**3. Sentence 12: Women should avoid bright or unusual nail polish colors.**

**Which of the following is the most effective revision of sentence 12?**

**A** First, women should avoid bright or unusual nail polish colors.

**B** Conversely, women should avoid bright or unusual nail polish colors.

**C** Finally, women should avoid bright or unusual nail polish colors.

**D** However, women should avoid bright or unusual nail polish colors.

**D** is the correct answer because “However” should be added to the beginning of sentence 12 because it helps suggest a contrast between the preceding sentence and the rest of sentence 12.

**4. Sentence 17: Too much scent may cause discomfort to those around you.**

**Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.**

**A** Too much

**B** After that, too much

**C** Yet too much

**D** Likewise, too much

**D** is the correct answer because “Likewise” should be added to the beginning of sentence 17 because the information is similar to the information in the sentence that precedes it.

### Math Challenge

High School Equivalency Test Preparation, Student Edition, Paxen 2014, Page 5, Question 18

In her role as an Olympic gymnast, Barbie has completed her balance beam routine in a gymnastics meet with a score of 15.975. The table shows the scores of four of Barbie's competitors. In what place did Barbie finish the competition.

Balance Beam Scores

Gymnast	Score
Johnson	15.995
Hen	15.98
Kalesh	15.97
Ryder	15.965

- A first
- B second
- C third
- D fourth
- E fifth

\*\*\*\*\*

Math Challenge Answer Key, High School Equivalency Test Preparation, Student Edition, Paxen 2014, Page 5, Question 18

In her role as an Olympic gymnast, Barbie has completed her balance beam routine in a gymnastics meet with a score of 15.975. The table shows the scores of four of Barbie's competitors. In what place did Barbie finish the competition.

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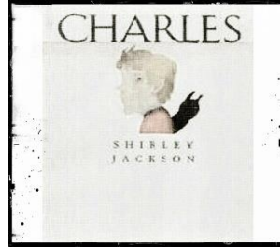
- A first
- B second
- C third
- D fourth
- E fifth

C is the correct answer since the scores of 15.965 and 15.97 are less than Barbie's scores.

Lesson Plan Format for: Charles, by Shirley Jackson

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 4 (Writing): Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about education and to see what real education consists of.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Begin the lesson by completing the pre-reading questions, either in groups or individually.</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Pre-reading questions, copy provided</li> <li>• Short story, <u>Charles</u>, copy provided</li> <li>• Essay prompt, copy provided</li> <li>• <u>Children Learn What They Live</u>, copy provided</li> <li>• Inferencing checklist, copy provided</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Use the pre-reading questions to talk about kindergarten.</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of inferencing, use inferencing checklist</li> <li>• Use "Take a Stand" to complete the lesson</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• <u>Children Learn What They Live</u></li> <li>• Crystal Ball: what would the world be like if we all lived by these words?</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Ticket out the Door: have you changed your view on the importance of education?</li> </ul>

## Charles by Shirley Jackson



Did you attend kindergarten? Yes or no

If yes, was it full day or half day?

What are the qualities of a kindergarten student?

What are the qualities of a kindergarten teacher?

Do you remember your first day of kindergarten or an event that happened in kindergarten? If so, describe it in 2-3 sentences.

If not, describe the earliest grade/event that you do remember. Write 2-3 sentences.

Do you remember learning math? What was it like?

Do you remember learning science? What was it like?

Do you remember learning to write? What was it like?

Do you remember learning to read? What was it like?

If there are 180 days in school, how many days, approximately, of school have you attended?

How many hours is that?

The title of the short story is Charles. What do you think this short story will be about? Explain in 2-3 sentences.

**Vocabulary: what do these words mean based on context clues**

Renounced

Swaggering

Raucous

Privileges

Reformation

Warily

Cynically

**Grammar: list 5 for each of the topics**

Nouns

Verbs

Adjectives

**One Really Good Sentence: write the sentence, the page number and why it is really good to you.**

Sentence:

Page number:

Why it is good to you:

### **Literary Terms**

Plot:

Character:

Conflict:

Climax:

Resolution:

Theme:

### **What Does It Mean?**

“being fresh”

“getting a spanking”



**CHARLES** by Shirley Jackson

The day my son Laurie started kindergarten, he gave up his little-boy clothes. He started wearing blue jeans with a belt. I watched him go off that first morning with the older girl next door. He looked as though he were going off to a fight.

He came home the same way at lunchtime. "Isn't anybody here?" he yelled. At the table, he knocked over his little sister's milk.

"How was school today?" I asked. "Did you learn anything?"

"I didn't learn nothing," he said.

"Anything," I said. "Didn't learn *anything*."

"But the teacher spanked a boy," Laurie said. "For being fresh."

"What did he do?" I asked. "Who was it?"

Laurie thought. "It was Charles," he said. "The teacher spanked him and made him stand in the corner. He was really fresh."

"What did he do?" I asked. But Laurie slid off his chair, took a cookie, and left.

The next day, Laurie sat down for lunch. "Well," he said, "Charles was bad again today." He grinned. "Today Charles hit the teacher," he said.

"Good heavens," I said. "I suppose he got spanked again?"

"He sure did," Laurie said.

"Why did Charles hit the teacher?" I asked.

"Because she tried to make him color with red crayons. Charles wanted to color with green crayons. So he hit the teacher. She spanked him and said nobody play with Charles. But everybody did."

The third day, Charles bounced a see-saw onto the head of a little girl. He made her bleed. The teacher made him stay inside during recess.

On Thursday, Charles had to stand in a corner. He was pounding his feet on the floor during story-time. Friday, Charles could not use the blackboard because he threw chalk.

On Saturday, I talked to my husband about it. "Do you think kindergarten is too disturbing for Laurie?" I asked him. "This Charles boy sounds like a bad influence."

"It will be all right," my husband said.

"There are bound to be people like Charles in the world. He might as well meet them now as later."

On Monday, Laurie came home late.

"Charles!" he shouted, as he ran up to the house. "Charles was bad again!"

I let him in and helped him take off his coat. "You know what Charles did?" he said. "Charles yelled so much that the teacher came in from first grade. She said our teacher had to keep Charles quiet. And so Charles had to stay after school. And so all the children stayed to watch him."

"What did he do?" I asked.

"He just sat there," Laurie said, noticing his father. "Hi Pop, you old dust mop."

"What does this Charles look like? My husband asked. "What's his last name?"

"He's bigger than me," Laurie said. "And he doesn't wear a jacket."

I could hardly wait for the first Parent-Teachers meeting. I wanted very much to meet Charles' mother. The meeting was still a week away.

On Tuesday, Laurie said, "Our teacher had a friend come to see her in school today."

My husband and I said together, "Was it Charles' mother?"

"Naaah," Laurie said. "Charles was fresh to the teacher's friend. They wouldn't let him do exercises."

"Fresh again?" I said.

"He kicked the teacher's friend," Laurie said. "The teacher's friend told Charles to touch his toes. And Charles kicked him."

"What do you think they'll do about Charles?" my husband asked.

"I don't know," Laurie said. "Throw him out of school, I guess."

Wednesday and Thursday were routine. Charles yelled during story-time. He hit a boy in the stomach and made him cry. On Friday, Charles stayed after school again. All the other children stayed to watch him.

On Monday of the third week, Laurie came home with another report. "You know what Charles did today?" he asked. "He told a girl to say a word, and she said it. The teacher washed her mouth out with soap, and Charles laughed."

"What word?" his father asked.

"It's so bad, I'll have to whisper it to you," Laurie said. He whispered into my husband's ear.

"Charles told the little girl to say *that?*" he said, his eyes widening.

"She said it *twice*," Laurie said. "Charles told her to say it *twice*."

"What happened to Charles?" my husband asked.

"Nothing," Laurie said. "He was passing out the crayons."

The next day, Charles said the evil word himself three or four times. He got his mouth washed out with soap each time. He also threw chalk.

My husband came to the door that night as I was leaving for the Parent-Teachers meeting. "Invite her over after the meeting," he said. "I want to get a look at the mother of that kid."

"I hope she's there," I said.

"She'll be there," my husband said. "How could they hold a Parent-Teachers meeting without Charles' mother?"

At the meeting, I looked over the faces of all the other mothers. None of them looked unhappy enough to be the mother of Charles. No one stood up and apologized for the way her son had been acting. No one mentioned Charles.

After the meeting, I found Laurie's teacher. "I've been wanting to meet you," I said. "I'm Laurie's mother."

Oh, yes," she said. "We're all so interested in Laurie."

"He certainly likes kindergarten," I said. "He talks about it all the time."

"He's had some trouble getting used to school," she said. "But I think he'll be all right."

"Laurie usually fits in quickly," I said. "I suppose his trouble might be from Charles' influence."

"Charles?" the teacher said.

"Yes," I said, laughing. "You must have your hands full with Charles."

"Charles?" she said. "We don't have any Charles in kindergarten."



**Children Learn What They Live**  
**By Dorothy Law Nolte, Ph.D.**

If children live with criticism, they learn to condemn.  
If children live with hostility, they learn to fight.  
If children live with fear, they learn to be apprehensive.  
If children live with pity, they learn to feel sorry for themselves.  
If children live with ridicule, they learn to feel shy.  
If children live with jealousy, they learn to feel envy.  
If children live with shame, they learn to feel guilty.  
If children live with encouragement, they learn confidence.  
If children live with tolerance, they learn patience.  
If children live with praise, they learn appreciation.  
If children live with acceptance, they learn to love.  
If children live with approval, they learn to like themselves.  
If children live with recognition, they learn it is good to have a goal.  
If children live with sharing, they learn generosity.  
If children live with honesty, they learn truthfulness.  
If children live with fairness, they learn justice.  
If children live with kindness and consideration, they learn respect.  
If children live with security, they learn to have faith in themselves and in those about them.  
If children live with friendliness, they learn the world is a nice place in which to live.

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**Crystal Ball: what would our world be like if we all lived by these words?**

## HiSET Reading, Non-fiction Question, page 15, questions 8-11

### Answer Key

### High School Equivalency Test Preparation

Paxen, 2014

#### What Does the Average Child Learn During Formal Education?

By the age of six the average child will have completed basic American education and be ready to enter school. If the child has been attentive in these preschool years, he or (5) she will already have mastered many skills.

From television, the child will have learned how to pick a lock, commit a fairly elaborate bank hold up, prevent wetness all day long, get the laundry twice as white, and kill people with (10) a variety of sophisticated armaments...

During formal education, the child learns that life is for testing. This stage lasts twelve years, a period during which the child learns that success comes from telling testers what (15) they want to hear.

Early in this stage, the child learns that he is either dumb or smart. If the teacher puts intelligent demands upon the child, the child learns he is smart. If the teacher expects little (20) of the child, the child learns he is dumb and soon quits bothering to tell the testers what they want to hear...

At this stage of education, a fresh question arises for everyone. If the point of lower (25) education was to get into college, what is the point of college? The answer is soon learned. The point of college is to prepare the student-no longer a child now-to get into graduate school. In college the student learns that it is (30) no longer enough simply to tell the testers what they want to hear. Many are tested for graduate school; few are admitted.

Those excluded may be denied valuable certificates to prosper in medicine, at the bar, (35) in the corporate boardroom. The student learns that the race is to the cunning and often, alas, to the unprincipled.

Thus, the student learns the importance of destroying competitors and merges richly (40) prepared to play his role in the great simmering melodrama of American life.

Afterward, the former student's destiny fulfilled, his life rich with Oriental carpets, rare porcelain, and full bank accounts, he may (45) one day find himself with the leisure and the inclination to open a book with a curious mind, and start to become educated.

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8. Which does the speaker categorize in lines 6 through 10 of the excerpt?

- A basic American education
- B knowledge of products by a child
- C a child's knowledge from preschool class
- D skills learned from television by a preschooler

9. Baker states, "During formal education, the child learns that life is for testing" (lines 11-12). How would the author categorize this period?

- A do what they're told
- B learn that success is based on doing well on tests
- C learn the importance of a good education
- D do not learn the importance of taking tests

10. How might the author describe those students not getting into graduate school?

- A as poor test takers
- B as knowing how to work the educational system
- C as future professionals
- D as intelligent test takers

11. How would the author categorize the person in the last paragraph? (lines 42-47)

- A wealthy and successful
- B one with worldly possessions
- C rich with things but not education
- D one who benefited from a strong education

## HiSET Reading, Non-fiction Question, page 15, questions 8-11

### Answer Key

### High School Equivalency Test Preparation

Paxen, 2014

#### What Does the Average Child Learn During Formal Education?

By the age of six the average child will have completed basic American education and be ready to enter school. If the child has been attentive in these preschool years, he or (5) she will already have mastered many skills.

From television, the child will have learned how to pick a lock, commit a fairly elaborate bank hold up, prevent wetness all day long, get the laundry twice as white, and kill people with (10) a variety of sophisticated armaments...

During formal education, the child learns that life is for testing. This stage lasts twelve years, a period during which the child learns that success comes from telling testers what (15) they want to hear.

Early in this stage, the child learns that he is either dumb or smart. If the teacher puts intelligent demands upon the child, the child learns he is smart. If the teacher expects little (20) of the child, the child learns he is dumb and soon quits bothering to tell the testers what they want to hear...

At this stage of education, a fresh question arises for everyone. If the point of lower (25) education was to get into college, what is the point of college? The answer is soon learned. The point of college is to prepare the student-no longer a child now-to get into graduate school. In college the student learns that it is (30) no longer enough simply to tell the testers what they want to hear. Many are tested for graduate school; few are admitted.

Those excluded may be denied valuable certificates to prosper in medicine, at the bar, (35) in the corporate boardroom. The student learns that the race is to the cunning and often, alas, to the unprincipled.

Thus, the student learns the importance of destroying competitors and merges richly (40) prepared to play his role in the great simmering melodrama of American life.

Afterward, the former student's destiny fulfilled, his life rich with Oriental carpets, rare porcelain, and full bank accounts, he may (45) one day find himself with the leisure and the inclination to open a book with a curious mind, and start to become educated.

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**8. Which does the speaker categorize in lines 6 through 10 of the excerpt?**

- A basic American education**
- B knowledge of products by a child**
- C a child's knowledge from preschool class**
- D skills learned from television by a preschooler**

D is the correct answer because the beginning of the paragraph says, "From television, the child will have learned...". Therefore you know that the paragraph is describing those skills a child has learned from television.

**9. Baker states, "During formal education, the child learns that life is for testing" (lines 11-12). How would the author categorize this period?**

- A do what they're told**
- B learn that success is based on doing well on tests**
- C learn the importance of a good education**
- D do not learn the importance of taking tests**

B is the correct answer because it best addresses what the author is saying in the paragraph. He says that his period is one "during which the child learns that success comes from telling testes what they want to hear."

**10. How might the author describe those students not getting into graduate school?**

- A as poor test takers**
- B as knowing how to work the educational system**
- C as future professionals**
- D as intelligent test takers**

A is the correct answer because the author is basing all of his arguments on students' test-taking abilities. Therefore, if someone was not able to pass a test required to go onto graduate school, the author would likely describe that person as a poor test taker.

**11. How would the author categorize the person in the last paragraph? (lines 42-47)**

- A wealthy and successful**

- B**     **one with worldly possessions**
- C**     **rich with things but not education**
- D**     **one who benefited from a strong education**

C is the correct answer because the last paragraph lists all the things that a person with a good record of test taking might have, but it ends by saying that person would then begin to get an education. The author believes that doing well in school is only part of what someone needs to have a good education.

## Self-Reflection



"First the birth canal, and now preschool!  
When does this end?"

Is school as traumatic as being born?

Are there any parts to school that are good?

What should early education be like?

### Math Challenge

High School Equivalency Test Preparation, Paxen 2014

Page 33, question 7

**Mrs. Johnston, a kindergarten teacher, has a piece of rope that is 14.4 meters in length. If she divides the rope into 4 equal pieces for a group project for her class, how many meters long will each piece be?**

- A 57.6
- B 18.4
- C 10.4
- D 3.6
- E 2.2

\*\*\*\*\*

### Math Challenge Answer Key

High School Equivalency Test Preparation, Paxen 2014

Page 33, question 7

**Mrs. Johnston, a kindergarten teacher, has a piece of rope that is 14.4 meters in length. If she divides the rope into 4 equal pieces for a group project for her class, how many meters long will each piece be?**

- A 57.6
- B 18.4
- C 10.4
- D 3.6
- E 2.2

D is the correct answer. Divide the length of the rope by the number of equal pieces.  
 $14.4/4=3.6$  meters.

## Lesson Plan Format for: Christmas in the Trenches

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about trench warfare and how war can be "stopped" for Christmas.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Carousel Your Way through KWL using the words, World War I, Trench Warfare, Christmas</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Christmas in the Trenches, copy provided</li> <li>• Fact or Opinion, copy provided</li> <li>• Writing checklist, copy provided</li> <li>• HiSET question</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Ask the students if war should take a break at holidays?</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Student interaction</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question, copy provided</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Free write: Why can war take a "holiday" on Christmas? If it can, why can't the war just end?</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• Questions provided</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Affinity mapping: what do you think would have if the war on terror was "put on hold" this Christmas?</li> </ul>
<p><b>Extension due to student interest</b></p>	<ul style="list-style-type: none"> <li>• Mustard Gas, copy provided</li> <li>• In Flander's Field, copy provided</li> </ul>



## Christmas in the Trenches

Starting on [Christmas](#) Eve, many German and British troops sang Christmas carols to each other across the lines, and at certain points the Allied soldiers even heard brass bands joining the Germans in their joyous singing.

At the first light of dawn on Christmas Day, some German soldiers emerged from their trenches and approached the Allied lines across no-man's-land, calling out "Merry Christmas" in their enemies' native tongues. At first, the Allied soldiers feared it was a trick, but seeing the Germans unarmed they climbed out of their trenches and shook hands with the enemy soldiers. The men exchanged presents of cigarettes and plum puddings and sang carols and songs. There was even a documented case of soldiers from opposing sides playing a good-natured game of soccer.

Some soldiers used this short-lived ceasefire for a more somber task: the retrieval of the bodies of fellow combatants who had fallen within the no-man's land between the lines.

The so-called Christmas Truce of 1914 came only five months after the outbreak of war in Europe and was one of the last examples of the outdated notion of chivalry between enemies in warfare. It was never repeated—future attempts at holiday ceasefires were quashed by officers' threats of disciplinary action—but it served as heartening proof, however brief, that beneath the brutal clash of weapons, the soldiers' essential humanity endured.

During [World War I](#), the soldiers on the Western Front did not expect to celebrate on the battlefield, but even a world war could not destroy the Christmas spirit.

Taken from: <http://www.history.com/topics/christmas-truce-of-1914>

## Did You Know?

On December 7, 1914, Pope Benedict XV suggested a temporary hiatus of the war for the celebration of Christmas. The warring countries refused to create any official cease-fire, but on Christmas the soldiers in the trenches declared their own unofficial truce.

## Fact or Opinion

1. Christmas is on December 25<sup>th</sup>.
2. World War I began when Archduke Ferdinand was assassinated.
3. World War I began on July 28, 1914 until November 11, 1918.
4. World War I was the first world war.
5. The Allied Powers were England, France and the Russian Empire.
6. All war is senseless.
7. War should cease during all religious holidays.
8. During the war, the United States and Japan joined the Allied Powers.
9. "All Quiet on the Western Front" is the best book about World War I.
10. If you do not know about World War I, you are missing out on huge part of history.
11. World War I saw the beginning of trench warfare, use of gas masks, and heavy artillery.
12. World War I saw many tragedies as compared to other wars.
13. The Selective Service, or draft, began when the United States entered World War I.

## World War I

Causes	Outcomes
Nationalism in Austria-Hungary	Treaty of Versailles forces Germany to accept responsibility for war; ordered to pay costly reparations
Rivalry between France and Germany	War brings end to Austro-Hungarian, Russian, and German empires
European nations' imperialism leads to territorial disputes in Asia and Africa	League of Nations forms in an effort to promote cooperation to prevent future wars
Conflicts cause the formation of extensive alliances and an arms race	More than 10 million soldiers lost their lives
Serbian nationalists assassinate Archduke Ferdinand of Austria-Hungary	Women enter many historically male occupations
Following Ferdinand's assassination, alliances draw many nations into the conflict, making it a world war.	Many nations experience economic hardships due to the expense of war
Britain is determined to keep its colonial territories and fears that unless it enters the war, Germany will control Western Europe.	

Taken from: High School Equivalency Test Preparation, Student Edition, Paxen, page 133, questions 19-22

**19. Which of the following is most responsible for turning the conflicts that started World War I into a world war?**

- a. nationalism in Austria-Hungary
- b. Territorial disputes in Asia
- c. European imperialism in Asia
- d. European imperialism in Africa
- e. Extensive alliances formed among nations



**20. In which historically male occupation did women likely work during the war?**

**During World War I, women most likely worked as**

- a. Coal miners
- b. Physicians
- c. Industrial workers
- d. Soldiers

## Answer Key

### World War I

Causes	Outcomes
Nationalism in Austria-Hungary	Treaty of Versailles forces Germany to accept responsibility for war; ordered to pay costly reparations
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Taken from: High School Equivalency Test Preparation, Student Edition, Paxen, page 133, questions 19 and 20

**19. Which of the following is most responsible for turning the conflicts that started World War I into a world war?**

- a. Nationalism in Austria-Hungary
- b. Territorial disputes in Asia
- c. European imperialism in Asia
- d. European imperialism in Africa

- e. Extensive alliances formed among nations

E is the correct answer because while all the choices can be considered causes of World War I, the extensive alliances formed among nations was the cause that turned the conflict that started World War I into a world war.

**20. In which historically male occupation did women likely work during the war?**

**During World War I, women most likely worked as**

- a. Coal miners
- b. Physicians
- c. Industrial workers
- d. Soldiers

C is the correct answer. During wartime, industries are needed to produce military items such as weapons and ammunition. You can also assume that most men who worked in those factories were fighting in the war. Because of this, it is assumed that the women were working in the factories.

### Math Challenge

The width of a trench in World War I was 3 feet and the length was 18 feet. What is the area of the trench?

If the width is 3 feet and the length is 18 feet, what is the perimeter?

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### Math Challenge

#### Answer Key

The width of a trench in World War I was 3 feet and the length was 18 feet. What is the area of the trench?

54 feet

If the width is 3 feet and the length is 18 feet, what is the perimeter?

42 feet

## How Mustard Gas Works

Taken from: <http://science.howstuffworks.com/mustard-gas5.htm>

Incoming! You jump to your feet at the slightest murmur of an attack. It's dark inside the bunker, and everywhere you look is blackness. Shells pound the ground no more than 50 meters in front of your position, rattling the fillings loose in your skull. Quickly you fumble in the darkness, looking for your rifle and helmet, but there's something odd about this attack. There's no explosion flash.

As you scramble to your position, the pounding stops and a low hissing fills the air, something you've never heard. Rifle in hand, you creep to the opening of your foxhole and peer out between two sandbags. Your [eyes](#) begin to [water](#) as you try to focus on the scene in front of you. The clear, starry night fades as a creeping yellow fog slowly begins to consume your view. To your left, soldiers in the bunker closest to the impact zones shout, "What's that smell?" You can make out a few hunched over at the waist, while several more frantically wave their hands in front of their faces.

The yellow fog creeps into your bunker, and you begin to lose your bearing. The sounds of men spitting and sneezing fill your ears. The air grows heavy, and the pungent garlic smell worsens. Panic sets in. You start to become dizzy from the heavy breathing, and your throat burns ever so slightly. You're in trouble.

Slowly the smell subsides, and the gas cloud dissipates. Everything around you swims into focus, and things settle down. Thankfully, you're breathing more easily and beginning to relax. You feel better now. "No worries. It was just a smoke screen," you think. You're alive, having just survived your first mustard gas attack. Little do you know the worst is yet to come.

**Summarize what you read** (Taken from *High School Equivalency Test Preparation, Student Edition, Paxen, page 27*)

When you summarize a passage or other feature, such as a table, graph, or diagram, you briefly identify and describe its main points. A summary generally does not contain the exact words of the original passage and it is always shorter.

Points to consider:

Summarizing involves separating the most relevant information (main idea and supporting details) from less relevant information (extra details).

Look for major points that are being made, not supporting details.

Summarizing requires using and recognizing synonyms or the different ways that an idea can be stated.

## Definition and Chemistry of Mustard Gas

Taken from: <http://science.howstuffworks.com/mustard-gas5.htm>

Before we learn how mustard gas works, it's important to understand what a gas is in terms of chemical warfare. Just the word "gas" may lead people to think that the substance is a vapor. That's not entirely true. Gases in warfare can be any chemical substance, including gases, solids and liquids, and generally fall into one of three medical groups.

1. **Lethal gases** can lead to disablement or death.
2. **Harassing agents** do not cause casualties but disrupt enemy soldiers.
3. **Accidental gases** include gases soldiers may encounter during war that are not directly related to a chemical weapon, such as excessive gases from gunpowder during a firefight.

**Mustard gas** or **mustard agent** is a poisonous gas that falls in the first group, along with even more lethal chemical agents such as chlorine gas and sarin. Tear gas, for example, is a non-poisonous gas that falls in the second category. Although tear gas is an effective weapon against advancing soldiers, it has no deadly effects. The same cannot be said about mustard gas.

Mustard gas, also called sulfur mustard, gets its name from its sometimes yellow appearance and mustard-like smell. It's referred to as a **blister agent** or a **vesicant**, and comes in vapor, solid or liquid form. Other blister agents include nitrogen mustard, lewisite and phosgene oxime.

Blister agents are no fun. Once in contact with an unsuspecting victim, they damage skin and internal areas such as mucous membranes inside your nose and throat. Mustard gas is an **alkylating agent**, meaning its chemicals destroy DNA and cells and liquefy tissue. In essence, mustard gas kills tissue and membranes in the areas it touches. Alkylating agents also are often used in cancer drugs.

As you might have picked up, mustard gas is very dangerous, especially compared to tear gas. If you measured mustard gas on a scale of one to 10, with 10 being the scariest, mustard gas would come in around a seven. Compared to Zyklon-B, the gas pellets used in gas chambers during the Holocaust, mustard gas seems tame. But that does not mean it has not caused its fair share of fatalities.

Mustard gas comprises four elements found on the periodic table: carbon, sulfur, chlorine and hydrogen. The sulfur and carbon lend to the gaseous appearance and smell in both solid and liquid states. The exact molecular formula is  $C_4H_8Cl_2S$ .

In its crude state, mustard gas resembles used motor oil: heavy and sludgy. Because of a relatively high freezing point of 58 degrees Fahrenheit (14 degrees Celsius), mustard gas proved a less effective weapon in colder temperatures. It would not spread throughout a large area, and it would fall to the ground before troops inhaled the deadly gas.

Mustard gas is not something you find in nature. You will not discover it under a rock or buried in a mine shaft. The chemists who stumbled upon the compound quickly realized it could be deadly and even fatal if inhaled. Many credit Fredrick Guthrie as the first to synthesize mustard gas in 1860, and Dow Chemical as the first company to produce it (during World War I) [source: Holland].

**Drawing Inferences** (Taken from High School Equivalency Test Preparation, Student Edition, Paxen, page 67)

An inference is a logical guess based on facts, evidence, experience, or reasoning. If you know several related facts, you can make inferences about their meaning. That meaning could be implied, or hinted at, through several details. When meaning is implied, the reader must use prior knowledge to connect facts.

Points to consider:

Before the author makes an inference, he or she collects and presents his or her observations.

Making an inference requires the use of logic to determine the truth based on available information.

Scientists generally make inferences about objects or event they cannot or did not observe directly.

Based on the reading above, what do you infer the reason was in using mustard gas during World War I? Use facts from the passage to support your inference.

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## Mustard Gas in World War I

During [World War I](#), a new style of fighting known as **trench warfare** pitted two armies close enough to each other that they could yell across the lines. But soldiers rarely ventured into the area between the two trenches commonly referred to as “**No Man's Land**” for fear of being gunned down, and battles would often settle into a stalemate. Chemical agents such as mustard gas became a way to break that uneasy deadlock.

[Germany's](#) first attempt at chemical weapons came in 1915 at the Battle of Ypres in [Belgium](#), in the form of chlorine gas. The gas cleared large sections of soldiers from the front lines, who fled once exposed, and ultimately killed 5,000 opposing troops [source: [Encyclopaedia Britannica](#)]. Chlorine gas burns the throats of its victims and causes death by asphyxiation, much like smoke kills people during a house [fire](#).

The Germans used mustard gas for the first time during war in 1917. They outfitted artillery shells and grenades with mustard gas that they fired in the vicinity of the troop target. After encountering several attacks, the Allies referred to mustard gas as **Hot Stuff** or **H.S.**, eventually dropping the S and just referring to it as H. By the end of the war, more than two dozen chemical agents had injured 1 million soldiers and civilians, killed 100,000 people and earned the well-deserved title of weapons of mass destruction [source: [Encyclopaedia Britannica](#)].

When you first encounter mustard gas, you may not even know anything is about to affect you. The best way to detect mustard gas is through smell. Soldiers exposed to mustard gas had a hard time detecting a gas attack but noticed a funny smell. Even under heavy doses, however, their noses adapted to the smell quickly, giving them the impression that the gas had dissipated. Have you ever noticed that you cannot smell something, be it good or bad, after you've been sniffing it for a few minutes? The same principle applies during a mustard gas attack.

So one of the most dangerous aspects of mustard gas doubles as one of its most desirable attributes as a weapon. We know mustard gas is difficult to detect unless you are under a direct attack. It is even harder to notice in contaminated areas where the gas has settled. That posed a problem for soldiers walking through an exposed area that underwent an attack say two days earlier. The chemical agent would stay in the ground for weeks, depending on the temperature. The colder the ground, the longer the mustard gas would linger.

At the time the Germans began using the chemical, gas masks proved useless because mustard gas could penetrate the filters and mask housing. Not only



that, but chemical suits had not been used yet, so mustard gas had the whole body to attack. And a little went a long way. One drop of the chemical weapon could cause skin burns on people within 10 cubic meters [source: [Ward](#)].

Mustard gas harmed and killed soldiers by the thousands and affected battle lines. Because of this versatility, mustard gas served as the most desirable chemical agent during World War I for both sides.

So what happens when you're exposed to mustard gas?

### Effects of Mustard Gas

After a mustard gas attack, you might think nothing more about it for a few hours or even a day. But eventually you would see red spots forming on your skin that quickly turned into painful blisters. If you underwent a direct attack and inhaled mustard gas, it would not take long to feel pain and swelling in your nose and throat as the blisters developed, sealing your airway.

The longer the exposure to mustard gas, the greater the damage it causes. Conversely, if you had a brief encounter, your body would heal faster, giving you a greater chance for survival. In some cases, victims experiencing multiple exposures develop hypersensitivity to the deadly chemical agent.

You might experience some of the following symptoms after you inhaled or touched mustard gas [source: [Centers for Disease Control](#)]:

- **Eyes:** irritation, redness, burning, inflammation and even blindness
- **Skin:** itchy redness that is replaced with yellow blisters
- **Respiratory system:** runny or bloody nose, sneezing, hoarse throat, shortness of breath, coughing, sinus pain
- **Digestive system:** abdominal pain, diarrhea, fever, nausea and vomiting

Some of the more serious respiratory symptoms would take even longer to surface, needing anywhere from 24 to 48 hours to appear. This latent period played havoc with soldiers exposed during the war, rendering troops incapacitated, filling infirmaries, taking up valuable human resources, bogging down reinforcements and generally demoralizing soldiers.

Make no mistake, mustard gas can be lethal. But it does not kill quickly. Rather fatalities primarily result from secondary broncho-pneumonia. Approximately 2 percent of all casualties who wore a respirator died from their injuries in World War I, compared to a death rate of 50 percent of those exposed without a respirator [source: [The Medical Front](#)]. The highest number of fatalities occurred

after the third or fourth day of exposure, with the most extreme cases taking up to three to four weeks [source: The Medical Front].

After an exposure to mustard gas during World War I, military doctors could not purge the effects of mustard gas in the body. Medical staff could treat the skin with ointments consisting of bleaching powder and white petroleum jelly and flush the eyes with saline solution, which helped some. For the more severe respiratory symptoms, medics treated patients with a menthol solution soaked into gauze administered through a metal breathing mask. This treatment alleviated dry cough but did not cure the bronchial infection. For the most severe casualties, medics quarantined the affected patients and hoped for the best. In the end, early detection proved to be the best way to defend against the most serious respiratory effects.

When the Allies learned what they faced during a mustard gas attack, they quickly developed safety measures to limit casualties. The most significant breakthrough came with improved respirators. An adequate respirator protected the face and eyes using a sealed hood and clear glass to cover the head and face, but that still left the rest of the body exposed. Chemical suits did not hit the scene until after World War I. If you survived a serious mustard gas attack, you came out as one of the lucky ones. Maybe you lost your eyesight and even your voice, but you survived.

Taken from: <http://science.howstuffworks.com/mustard-gas5.htm>

**Compare and Contrast** (Taken from *High School Equivalency Test Preparation, Student Edition, Paxen, page 47*)

When you compare, you identify the way in which organisms, objects, places or events are similar and the ways in which they are different. When you contrast, you identify only how those organisms, objects, places, or events are different.

Points to consider:

When comparing objects or organisms, look for ways in which they are alike and different.

Scan the illustrations and skim the passage to determine what they have in common.

When contrasting objects or organisms, look for ways in which they are different.

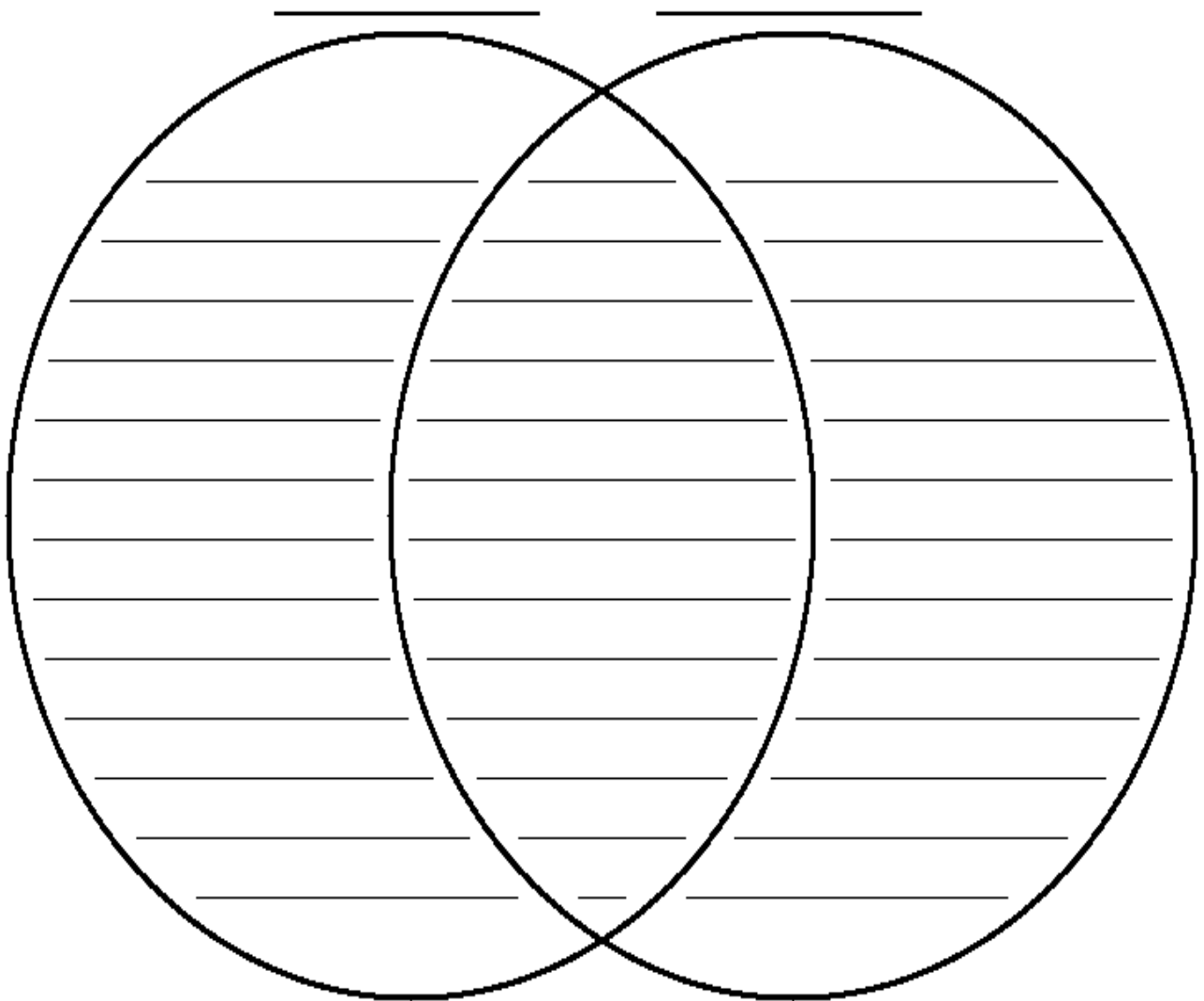
Scan the illustrations and skim the passage to determine what makes them different.

Watch this You Tube video on mustard gas:

<https://www.youtube.com/watch?v=22w1UVGv71M> and this You Tube video on mustard gas: <https://www.youtube.com/watch?v=Crts7MEqROc>

Compare and Contrast the passage with the You Tube videos. Use the Venn Diagram to help guide your work.

Name : \_\_\_\_\_ **Venn Diagram**



## In Flanders Fields by John McCrae, May 1915



In Flanders fields the poppies blow  
Between the crosses, row on row,  
That mark our place; and in the sky  
The larks, still bravely singing, fly  
Scarce heard amid the guns below.

We are the Dead. Short days ago  
We lived, felt dawn, saw sunset glow,  
Loved and were loved, and now we lie  
In Flanders fields.

Take up our quarrel with the foe:  
To you from failing hands we throw  
The torch; be yours to hold it high.  
If ye break faith with us who die  
We shall not sleep, though poppies grow  
In Flanders fields.

### Theme

The theme, or main idea, of the poem, reveals something about human nature, such as a lesson about life. The theme will teach a larger lesson about ourselves or about humanity.

In the poem, "In Flander's Fields", what is the theme? Use words from the poem to validate your finding.

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## Rhythm and Rhyme

Rhythm and rhyme are sound effects that influence a reader's understanding of poetry. Rhythm is a pattern of stressed syllables. Rhythm can be created by the use of punctuation and line breaks. Words that rhyme have similar vowel or consonant sounds. (teach and peach)

Partial rhymes, such as teach and team, include words that do not rhyme completely.

To determine a rhyming pattern, assigning a letter to the last word (the rhyming word) of a line of a stanza.

A stanza is a section of a poem, similar to a paragraph in fiction.

Poetry is meant to be read aloud. What is the rhyming pattern of "In Flander's Field"?

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What words describe the rhyming pattern of "In Flander's Field"? (examples might be, surprising, off beat, delicate, graceful, regular, reliable, lurching, unsteady...what are your word choices?)

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HiSET Test Preparation: Reading, Student Edition, Paxen, page 164

## Reaction to “In Flanders Field”

After reading, “In Flander’s Field”, how does the author, Major John McCrae feel about war?

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What is the evidence from the poem that makes you conclude this?

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Did this poem describe the effects of war to you? Use evidence from the passage to demonstrate your understanding.

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### Inspiration for “In Flanders Fields”

During the early days of the Second Battle of Ypres a young Canadian artillery officer, Lieutenant Alexis Helmer, was killed on 2<sup>nd</sup> May, 1915 in the gun positions near Ypres. An exploding German artillery shell landed near him. He was serving in the same Canadian artillery unit as a friend of his, the Canadian military doctor and artillery commander **Major John McCrae**. As the brigade doctor, John McCrae was asked to conduct the burial service for Alexis because the chaplain had been called away somewhere else on duty that evening. It is believed that later that evening, after the burial, John began the draft for his now famous poem “In Flanders Fields”.

Taken from: <http://www.greatwar.co.uk/poems/john-mccrae-in-flanders-fields.htm>

## Lesson Plan for: Edward Jenner and Small Pox

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Summarize the key supporting details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students understand who Edward Jenner was and how critical he was in regards to the eradication of small pox.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Begin the lesson by talking about the topic in general. Discuss the severity of small pox.</li> <li>• Watch this video on smallpox: <a href="https://www.youtube.com/watch?v=yqUFy-t4MIQ">https://www.youtube.com/watch?v=yqUFy-t4MIQ</a></li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Edward Jenner, article provided</li> <li>• Smallpox, article provided</li> <li>• HiSET question</li> <li>• Political cartoon</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• A-Z brainstorming</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of modeling of think aloud strategy</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Political cartoon</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• What would happen if there were to be a terrorist attack which would unleash the smallpox virus on the world?</li> </ul>

## Edward Jenner Discovered the Smallpox Vaccine - The Very First Vaccine



**Paragraph 1:** Edward Jenner was an English country doctor in the late 1700s. In his practice, smallpox was one of the most common, and worst, problems he encountered. Smallpox at that time was greatly feared and was a major killer of the young. Jenner used keen observation skills and a lot of daring that wouldn't be possible today to pave the way for all vaccinations.

**One key fact from the paragraph:**

**One great vocabulary word:**

**How many centuries have passed since Edward Jenner's discovery?**

**Paragraph 2:** In the farm community where Jenner worked, a large majority of the farmers were cattle farmers. In 1788, an epidemic hit the small town of Gloucestershire where he practiced medicine and he noticed that the cattle farmers were not the ones dying from smallpox.

**One key fact from the paragraph:**

**One great vocabulary word:**

The only treatment available at the time was to inoculate healthy people with the liquid from the pustules of people with mild cases of the disease. This worked sometimes, but often had fatal results. Jenner theorized that cowpox (a much milder but similar disease to smallpox) was somehow protecting the farmers. In 1796 he had the opportunity to prove his theory correct.

**One key fact from the paragraph:**

**One great vocabulary word:**

**How many years passed from the outbreak in paragraph 2 to his theory?**

**Paragraph 3:** A young milkmaid named Sarah Nelmes came to see him about sores she had developed on her hands. He identified them as cowpox. He carefully extracted some liquid from the sores and set about proving that cowpox could protect against smallpox. His method would be illegal today but he bravely or foolishly (depending on your perspective) persevered.

**One key fact from the paragraph:**



**One great vocabulary word:**

**Paragraph 4:** He approached a local farmer and asked if he could inoculate his son, James Phipps, with the cowpox. He explained that if he was correct, his son would never catch smallpox. Given the fear that surrounded smallpox, the farmer agreed. So, Dr. Jenner made two small cuts on the boy's arm and poured in the cowpox and bandaged the arm. Soon, the boy was ill with cowpox, but not terribly ill and he made a complete recovery.

**One key fact from the paragraph:**

**One great vocabulary word:**

**Paragraph 5:** Then Dr. Jenner really made a rash and dangerous move. He repeated his prior experiment but this time he used liquid he had extracted from a patient with a mild case of smallpox. If his theory was correct, the boy would not get sick, if he was wrong the patient could die and he would be a murderer. Everyone was thrilled when the boy did not get smallpox and Jenner had proved his theory.

**One key fact from the paragraph:**

**One great vocabulary word:**

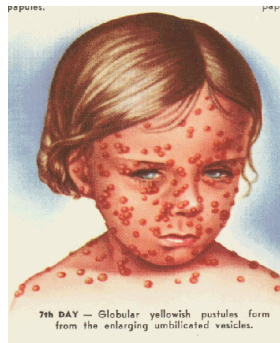
**Paragraph 6:** The remarkable thing about Jenner's discovery of vaccination in 1798, is that it came before people knew that viruses existed, or much about the immune system. He used his observation of case studies to fit the puzzle pieces together and start a truly lifesaving procedure. His idea was met with widespread skepticism but he persisted in spite of the resistance he met. There was even a cartoon drawn making fun of his theory showing people developing cow parts after vaccination.

**One key fact from the paragraph:**

**One great vocabulary word:**

Taken from: [http://www.scienceheroes.com/index.php?option=com\\_content&view=article&id=240&Itemid=216](http://www.scienceheroes.com/index.php?option=com_content&view=article&id=240&Itemid=216)

## Smallpox



### What is Smallpox?

Smallpox is a contagious, disfiguring and often deadly disease that has affected humans for thousands of years. Naturally occurring smallpox was eradicated worldwide by 1980 the result of an unprecedented global immunization campaign.

Samples of smallpox virus have been kept for research purposes. This has led to concerns that smallpox could someday be used as a biological warfare agent.

No cure or treatment for smallpox exists. A vaccine can prevent smallpox, but the risk of the vaccine's side effects is too high to justify routine vaccination for people at low risk of exposure to the smallpox virus.

Smallpox is caused by infection with the variola virus. The virus can be transmitted:

- **Directly from person to person.** Direct transmission of the virus requires fairly prolonged face-to-face contact. The virus can be transmitted through the air by droplets that escape when an infected person coughs, sneezes or talks.
- **Indirectly from an infected person.** In rare instances, airborne virus can spread farther, possibly through the ventilation system in a building, infecting people in other rooms or on other floors.
- **Via contaminated items.** Smallpox can also spread through contact with contaminated clothing and bedding, although the risk of infection from these sources is less common.
- **As a terrorist weapon, potentially.** A deliberate release of smallpox is a remote threat. However, because any release of the virus could spread the disease quickly, government officials have taken numerous precautions to protect against this possibility, such as stockpiling smallpox vaccine.

Summarize what you have read in 3-5 sentences.

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**What would you title this section and why? (Hint...Read before you write)**

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The first symptoms of smallpox usually appear 12 to 14 days after you're infected. During the incubation period of seven to 17 days, you look and feel healthy and can't infect others.

Following the incubation period, a sudden onset of flu-like signs and symptoms occurs. These include:

- Fever
- Overall discomfort
- Headache
- Severe fatigue
- Severe back pain
- Vomiting, possibly

A few days later, flat, red spots appear first on your face, hands and forearms, and later on your trunk. Within a day or two, many of these lesions turn into small blisters filled with clear fluid, which then turns into pus. Scabs begin to form eight to nine days later and eventually fall off, leaving deep, pitted scars.

Lesions also develop in the mucous membranes of your nose and mouth and quickly turn into sores that break open.

Most people who get smallpox survive. However, a few rare varieties of smallpox are almost always fatal. These more-severe forms most commonly affect pregnant women and people with impaired immune systems.

People who recover from smallpox usually have severe scars, especially on the face, arms and legs. In some cases, smallpox may cause blindness.

**Infectious Outbreak** (Can you figure out the errors in the section?)

If an **outbrake** of smallpox were to **ockur** today, **its** likely that most doctors **would'nt** realize what it was in **it's** early stages, which would allow the disease to spread.

Even one confirmed case of smallpox would be considered an "**International Health Emergency**". The **centers for disease control and prevention** can do definitive testing using a **tizzue** sample taken from one of the lesions on the skin of the infected person.

No cure for smallpox exists. In the event of an **infecision**, treatment would focus on relieving symptoms and **keeping** the person from becoming dehydrated. Antibiotics

might be prescribed if the person also develops a bacterial infection in the **lunges** or on the skin.

In the event of an outbreak, people who had smallpox would be kept in isolation in an effort to control the spread of the **Virus**. **Any one** who had contact with someone who developed an infection would need the smallpox vaccine, which can prevent or **lessen** the severity of the disease if given within **for** days of exposure to the smallpox virus.

The vaccine uses **alive** virus that's related to smallpox, and it can occasionally cause serious complications, such as infections affecting the heart or **brian**. That's why a general vaccination program for everyone isn't recommended at this time. The potential risks of the vaccine outweigh the benefits, in the absence of an actual smallpox outbreak.

### If you were vaccinated as a child

It's not known how long immunity lasts after a smallpox vaccine. It's likely that a previous vaccination would offer partial immunity, which might protect against the disease's most-serious complications. But if an outbreak ever occurred, people who were vaccinated as children would still likely receive a new vaccination after direct exposure to someone with the virus.

Taken from: <http://www.mayoclinic.org/diseases-conditions/smallpox/basics/definition/con-20022769>

**Closing Thoughts:** What do you think about smallpox? Do you think it is as deadly as the medical community says? Do you think a smallpox outbreak is possible? What are your closing thoughts?

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# Smallpox

## Answer Key



### What is Smallpox?

Smallpox is a contagious, disfiguring and often deadly disease that has affected humans for thousands of years. Naturally occurring smallpox was eradicated worldwide by 1980 the result of an unprecedented global immunization campaign.

Samples of smallpox virus have been kept for research purposes. This has led to concerns that smallpox could someday be used as a biological warfare agent.

No cure or treatment for smallpox exists. A vaccine can prevent smallpox, but the risk of the vaccine's side effects is too high to justify routine vaccination for people at low risk of exposure to the smallpox virus.

Smallpox is caused by infection with the variola virus. The virus can be transmitted:

- **Directly from person to person.** Direct transmission of the virus requires fairly prolonged face-to-face contact. The virus can be transmitted through the air by droplets that escape when an infected person coughs, sneezes or talks.
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Summarize what you have read in 3-5 sentences. **Answers will vary**

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**What would you title this section and why? (Hint...Read before you write) Answers will vary**

---

The first symptoms of smallpox usually appear 12 to 14 days after you're infected. During the incubation period of seven to 17 days, you look and feel healthy and can't infect others.

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Lesions also develop in the mucous membranes of your nose and mouth and quickly turn into sores that break open.

Most people who get smallpox survive. However, a few rare varieties of smallpox are almost always fatal. These more-severe forms most commonly affect pregnant women and people with impaired immune systems.

People who recover from smallpox usually have severe scars, especially on the face, arms and legs. In some cases, smallpox may cause blindness.

**Infectious Outbreak** (How many errors can you find in the section? (Hint...you should have found ).

If an **outbrake** of smallpox were to **ockur** today, **its** likely that most doctors **would'nt** realize what it was in **it's** early stages, which would allow the disease to spread.

Even one confirmed case of smallpox would be considered an **"International Health Emergency"**. The **centers for disease control and prevention** can do definitive testing using a **tizzue** sample taken from one of the lesions on the skin of the infected person.

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It's not known how long immunity lasts after a smallpox vaccine. It's likely that a previous vaccination would offer partial immunity, which might protect against the disease's most-serious complications. But if an outbreak ever occurred, people who were vaccinated as children would still likely receive a new vaccination after direct exposure to someone with the virus.

Taken from: <http://www.mayoclinic.org/diseases-conditions/smallpox/basics/definition/con-20022769>

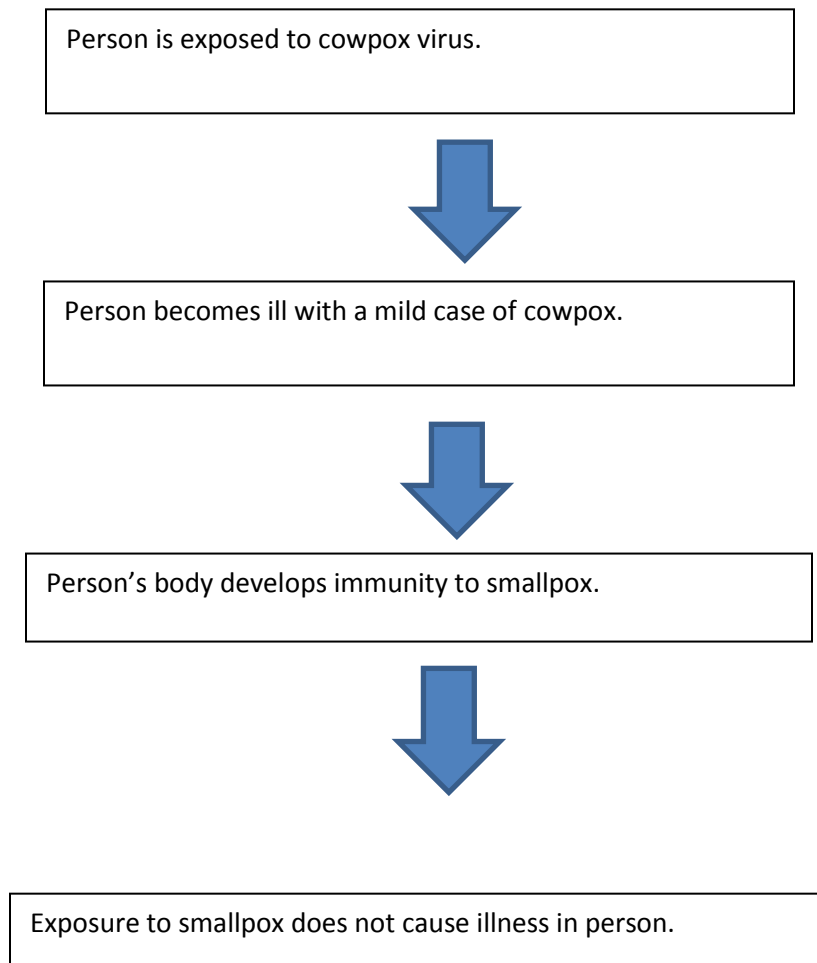
**Closing Thoughts:** What do you think about smallpox? Do you think it is as deadly as the medical community says? Do you think a smallpox outbreak is possible? What are your closing thoughts?

HiSET Science Question, page 62, questions 2-3

High School Equivalency Test Preparation

Paxen, 2014

In the late 1700's, the deadly disease smallpox was widespread. Edward Jenner, a doctor, found that most people who caught a related but milder disease called cowpox recovered. He further discovered that later exposure to smallpox did not affect these people. Jenner decided to expose a healthy young boy to the cowpox virus. The boy became mildly ill and then recovered. Jenner then exposed the boy to smallpox. The boy did not become ill. Without knowing it, Jenner had given the first vaccination. Vaccination involved injecting people with dead or weakened bacteria or viruses. AS a results, a person's immune system produces antibodies to a particular bacterium or virus. Antibodies are proteins that identify disease-causing invaders. If a person is later exposed to the same microbe, the antibodies from his or her immune system can quickly recognize the invader. Today, vaccination is a major weapon in preventing disease.





**2. What does the body produce as a result of exposure to cowpox?**

- A** antibodies that protect against cowpox and, to some degree, smallpox
- B** red blood cells that protect against antibodies
- C** bacteria that cause cowpox
- D** antibodies that protect against any disease

**3. What limitations were inherent in the procedure that Edward Jenner carried out?**

- A** It resulted in immunity to both cowpox and smallpox.
- B** It produced poisons that killed the test subjects exposed to smallpox.
- C** The results could not explain why the test subjects became immune to cowpox and smallpox.
- D** The procedure could not be repeated.

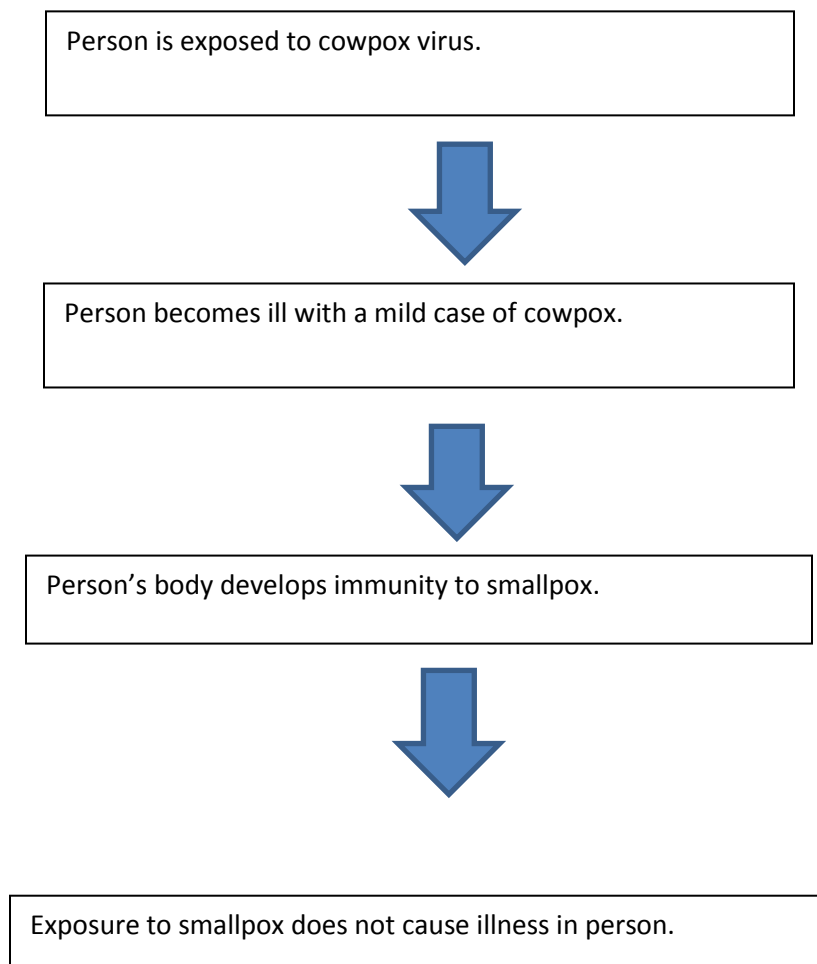
HiSET Science Question, page 62, questions 2-3

Answer Key

High School Equivalency Test Preparation

Paxen, 2014

In the late 1700's, the deadly disease smallpox was widespread. Edward Jenner, a doctor, found that most people who caught a related but milder disease called cowpox recovered. He further discovered that later exposure to smallpox did not affect these people. Jenner decided to expose a healthy young boy to the cowpox virus. The boy became mildly ill and then recovered. Jenner then exposed the boy to smallpox. The boy did not become ill. Without knowing it, Jenner had given the first vaccination. Vaccination involved injecting people with dead or weakened bacteria or viruses. AS a results, a person's immune system produces antibodies to a particular bacterium or virus. Antibodies are proteins that identify disease-causing invaders. If a person is later exposed to the same microbe, the antibodies from his or her immune system can quickly recognize the invader. Today, vaccination is a major weapon in preventing disease.



**2. What does the body produce as a result of exposure to cowpox?**

- A antibodies that protect against cowpox and, to some degree, smallpox**
- B red blood cells that protect against antibodies**
- C bacteria that cause cowpox**
- D antibodies that protect against any disease**

**A is the correct answer because exposure to cowpox produces antibodies to cowpox virus; these antibodies also provide some protections against smallpox.**

**3. What limitations were inherent in the procedure that Edward Jenner carried out?**

- A It resulted in immunity to both cowpox and smallpox.**
- B It produced poisons that killed the test subjects exposed to smallpox.**
- C The results could not explain why the test subjects became immune to cowpox and smallpox.**
- D The procedure could not be repeated.**

**C is the correct answer because the causes of disease were not known in the late 1700's, the procedure could not explain why test subjects became immune to the diseases.**

**Math Challenge**

**High School Equivalency Test Preparation, Paxen, 2014**

Based on page 68, question 26

**One Sunday, Peter developed a rash and quickly became ill. He was unable to do his chores on the family farm. On a good day, Peter would start his chores at 5:12am and finish his chores by 8:23am. How long did it take Peter to do his chores?**

- A** 2 hours and 13 minutes
- B** 3 hours and 11 minutes
- C** 4 hours and 12 minutes
- D** 4 hours and 18 minutes

\*\*\*\*\*

**Math Challenge**

**High School Equivalency Test Preparation, Paxen, 2014**

Based on page 68, question 26

**One Sunday, Peter developed a rash and quickly became ill. He was unable to do his chores on the family farm. On a good day, Peter would start his chores at 5:12am and finish his chores by 8:23am. How long did it take Peter to do his chores?**

- A** 2 hours and 13 minutes
- B** 3 hours and 11 minutes
- C** 4 hours and 12 minutes
- D** 4 hours and 18 minutes

B is the correct answer. If you subtract 8:23 from 5:12, you get 3 hours and 11 minutes.

## Self-Reflection



Image taken from: <https://www.pinterest.com/pin/555139091544148861/>

**After all this that you learned about smallpox, do you think that children should be vaccinated?**

**Should the parents be the only ones to decide if their child gets vaccinated?**

**What diseases should children be vaccinated for?**

**If a child is not vaccinated, should they be banned from school?**

## Lesson Plan Format for: Fighting in Hockey

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about the fighting in hockey and if they deem it violent.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Watch this link: <a href="https://www.youtube.com/watch?v=l6lFieHFSgw">https://www.youtube.com/watch?v=l6lFieHFSgw</a></li> <li>• <a href="#">Complete "Fighting in Hockey" while viewing, copy provided</a></li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Fighting in Hockey, copy provided</li> <li>• Political cartoon about fights in hockey, copy provided</li> <li>• NHL math, copy provided</li> <li>• Brain Injury Basics, copy provided</li> <li>• Essay, How Dangerous is Fighting in Sports, copy provided</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• What do you think about the violence in hockey? Class discussion</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Found Poems</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question, copy provided</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Haiku of fighting in hockey</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• NHL math, copy provided</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Watch this link: Top 10 Fights in Sports: <a href="https://www.youtube.com/watch?v=07ziX2wguQw">https://www.youtube.com/watch?v=07ziX2wguQw</a></li> <li>• Take a Stand in regards to fights in all sports and concussions</li> </ul>

## Fighting in Hockey



Global National, You Tube

It can be watched at: <https://www.youtube.com/watch?v=l6lFieHFSgw>

CCR Anchor 7 Reading: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

1. What two teams were playing?
2. What is the description of how one players' head hit the ice?
3. What type of figurative language is this an example of?
4. One of the hockey players engaged in the fight suffered a \_\_\_\_\_.
5. This type of injury is (serious, or not serious) to any type of sports player.
6. Being ejected from a game means \_\_\_\_\_.
7. Being banned from fighting means \_\_\_\_\_.

## Fighting in Hockey

### Answer Key

Global National

You Tube

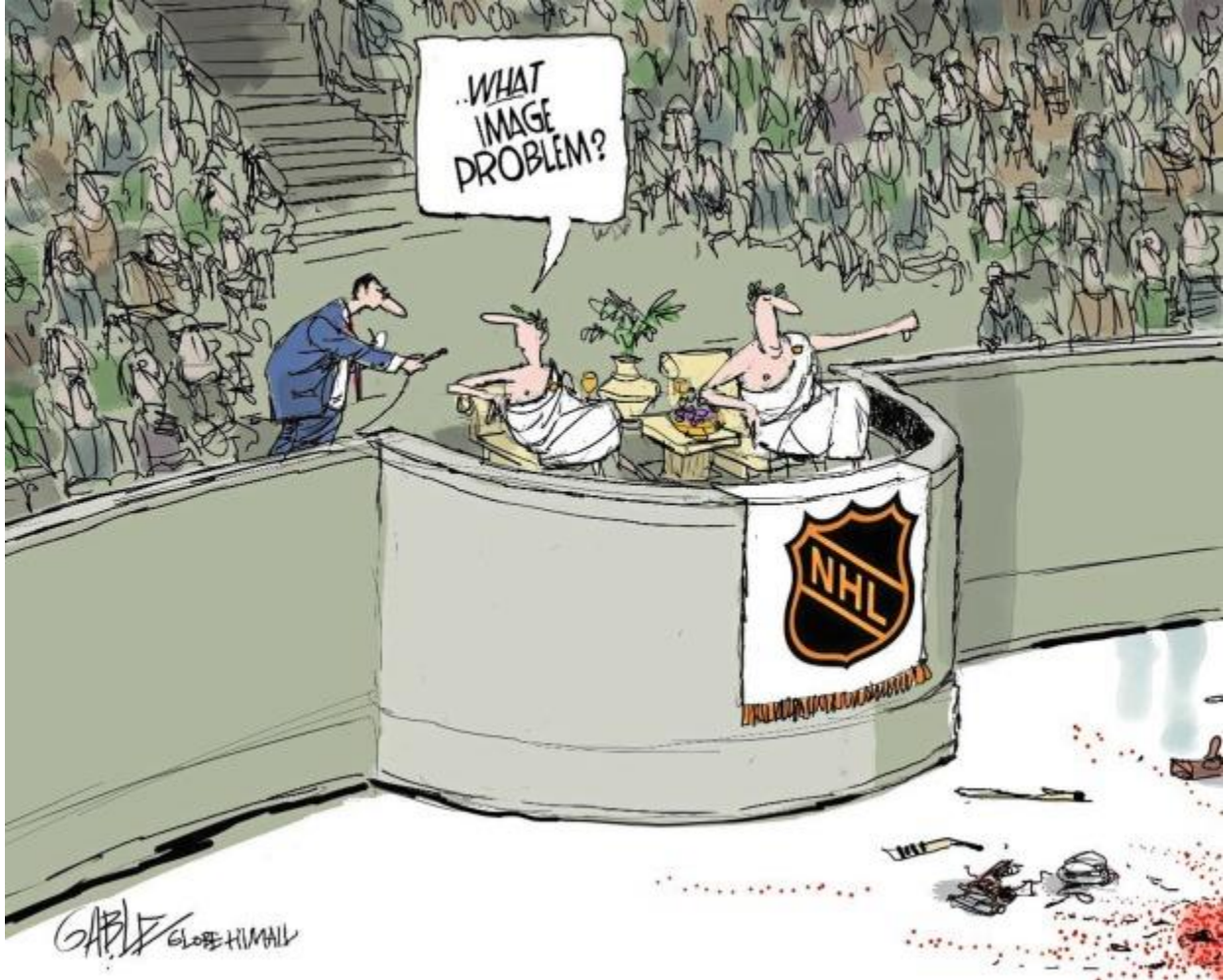
It can be watched at: <https://www.youtube.com/watch?v=l6lFieHFSgw>

CCR Anchor 7 Reading: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

1. What two teams were playing? **Canadiens and Maple Leafs**
2. What is the description of how one players' head hit the ice? **Like a hammar**
3. What type of figurative language is this an example of? A **simile** is a figure of speech that compares two things that are alike in some way. To help you identify a **simile** versus a **metaphor**, know that the words "like" or "as" are typically used in a **simile**. **It is a simile.**
4. One of the hockey players engaged in the fight suffered a **concussion**.
5. This type of injury is (**serious**, or not serious) to any type of sports player.
6. Being ejected from a game means **being taken out of that game**.
7. Being banned from fighting means **not being allowed to do it anymore**.



## Fighting in Hockey and Roman Gladiators?



Do you understand what this political cartoon is saying?

Would you agree that fights in hockey equal the brutality in the gladiator fights?

(If you are not sure, check out this link and compare it to the fights we saw in the hockey clips.)

## Brain Injury Basics: What You Need to Know

- BY ABC NEWS,  
March 27, 2009

The chief warning signs and symptoms of a concussion or head injury are: confusion, memory loss, headache, nausea or vomiting, blurred vision, slurred speech and balance problems. All of these symptoms do not have to be present, and they can range from mild to severe. The frontal lobe of the brain can essentially get whiplash, forming tiny tears in the front of the brain, in the area that controls timing. The frontal lobe is responsible for executive processes: your ability to focus, to understand what is being said to you, and to make decisions.

About 1.7 million people each year visit emergency rooms with head injuries and 90 percent turn out to be concussions. Of those people, about 80 percent recover from the concussion within three months.

People with severe trauma to the brain can die within hours. This happens because if the person is hit from an angle, the brain can whip around inside the skull, tearing and stretching, which causes a large hemorrhage.

It is not just the force, it is the way it is applied. In a rotational shearing of the brain from whiplash, you hit the head and the whole brain rotates and causes tears. You can think of it as the brain stretching. Parts of it are moving faster than others, and that stretching causes a tearing of the tissue -- even deep tissue that is responsible for being awake. The fibers in the front part of the brain are most likely to get stretched, and those are the ones that correlate with attention and memory.

The really bad injury comes from being hit on the side. If you are hit in the front, the brain goes back and forth in a linear fashion. If you hit the side of your head, it is more likely to rotate in the dangerous manner noted above. If a woodpecker hit a tree at an angle, it would pass out. That is why it hits the tree straight on.

The back part of the brain does not stretch very much because it is part of the neck. If it did, people after a concussion would complain of being blind, because that is the part of the brain that controls vision.

Immediate care can prevent a fatality.

Taken from and modified: <http://abcnews.go.com/GMA/OnCall/story?id=7121271&page=1>



## National Hockey League Math

1. So far, in the 2015-2016 NHL season, there have been 354 games with 95 fights. What is the percentage of fights per game?
2. From the 2000-2001 season to games played so far in the 2015-2016 season, how many games had been played in the NHL to date. There are 1230 games played per season, and 354 games have been played to date.
3. From various seasons since 2000-2001, the top 5 seasons with fights were: 803, 734, 684, 789, 714.

Put them in order from least to greatest.

Find the average of fights in the top 5 seasons.

4. From various seasons since 2000-2001, the lowest 5 seasons with fights were: 391, 497, 347, 469, 466.

Put them in order from greatest to least.

Find the average of fights in the lowest 5 seasons.

Stats taken from: <http://www.hockeyfights.com/stats/>

## National Hockey League Math: Answer Key

1. So far, in the 2015-2016 NHL season, there have been 354 games with 95 fights. What is the percentage of fights per game?

### 3.73 fights per game

2. From the 2000-2001 season to games played so far in the 2015-2016 season, how many games had been played in the NHL to date. There are 1230 games played per season, and 354 games have been played to date.

**14 complete seasons x 1230=17,220 games + 354=17574 games**

3. From various seasons since 2000-2001, the top 5 seasons with fights were: 803, 734, 684, 789, 714.

Put them in order from least to greatest.

**684, 714, 734, 789, 803**

Find the average of fights in the top 5 seasons.

**3724/5=744.8 fights**

4. From various seasons since 2000-2001, the lowest 5 seasons with fights were: 391, 497, 347, 469, 466.

Put them in order from greatest to least.

**497, 469, 466, 391, 347**

Find the average of fights in the lowest 5 seasons.

**2170/5=434 fights**

Stats taken from: <http://www.hockeyfights.com/stats/>

**Is Fighting Necessary in Hockey?**

**(A)**

**(1) Just as there are two sides to every hockey fight, there are two sides to the discussion of whether the national hockey league (NHL) should ban fighting. (2) Both sides claim that their views have the longevity and popularity of the sport in mind.**

**(B)**

**(3) Supporters of fighting ban in the NHL argue that fighting puts the players in too much danger. (4) As an example, some people point to the death of Don Sanderson, who hit his head during a fight and died three weeks later. (5) Supporters also argue that a ban on fighting would not only protect players, but also encourage more families to attend games without exposing their children to violence. (6) AS the Executive Director of the Institute of Sport points out, a ban on fighting would increase the popularity of the sport and bring in new fans.**

**(C)**

**(7) Supporters of fighting argue that some fans would stop watching the game if combat between players were banned. (8) One espn analyst suggests that fighting in the NHL brings in more fans than it keeps away. (9) Also, some supporters believe that a ban would be ineffective. (10) Other Leagues, such as Major League Baseball and the National Basketball Association, have banned fighting, but brawling continue to occur.**

**12. Sentence1: Just as there are two sides to every hockey fight, there are two sides to the discussion of whether the national hockey league (NHL) should ban fighting.**

**Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.**

- A national hockey league**
- B national Hockey League**
- C National Hockey league**
- D National Hockey League**

**13. Sentence 6: AS the Executive Director of the Institute of Sport points out, a ban on fighting would increase the popularity of the sport and bring in new fans.**

**Which correction should be made to sentence 6?**

- A change Sport to sport
- B change Executive Director to executive director
- C change fans to Fans
- D no correction is necessary

**14. Sentence 8: One espn analyst suggests that fighting in the NHL brings in more fans than it keeps away.**

**Which correction should be made to sentence 8?**

- A replace espn with ESPN
- B replace NHL with nhl
- C replaced analyst with Analyst
- D no correction is necessary

**15. Sentence 10: Other Leagues, such as Major League Baseball and the National Basketball Association, have banned fighting, but brawling continues to occur.**

**Which correction should be made to sentence 10?**

- A replace Baseball with baseball
- B replace Other Leagues with Other leagues
- C replace Basketball with basketball
- D replace Major with major

High School Equivalency Test Preparation, Paxen, 2014

Is Fighting Necessary in Hockey?

(A)

(1) Just as there are two sides to every hockey fight, there are two sides to the discussion of whether the national hockey league (NHL) should ban fighting. (2) Both sides claim that their views have the longevity and popularity of the sport in mind.

(B)

(3) Supporters of fighting ban in the NHL argue that fighting puts the players in too much danger. (4) As an example, some people point to the death of Don Sanderson, who hit his head during a fight and died three weeks later. (5) Supporters also argue that a ban on fighting would not only protect players, but also encourage more families to attend games without exposing their children to violence. (6) AS the Executive Director of the Institute of Sport points out, a ban on fighting would increase the popularity of the sport and bring in new fans.

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12. Sentence1: Just as there are two sides to every hockey fight, there are two sides to the discussion of whether the national hockey league (NHL) should ban fighting.

Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.

- A national hockey league
- B national Hockey League
- C National Hockey league
- D National Hockey League

D is the correct answer since this is a proper noun and is to be capitalized.



**13. Sentence 6: AS the Executive Director of the Institute of Sport points out, a ban on fighting would increase the popularity of the sport and bring in new fans.**

**Which correction should be made to sentence 6?**

- A change Sport to sport
- B change Executive Director to executive director
- C change fans to Fans
- D no correction is necessary

C is the correct answer since "executive director" does not appear with the name of a person, there is no need to capitalize it.

**14. Sentence 8: One espn analyst suggests that fighting in the NHL brings in more fans than it keeps away.**

**Which correction should be made to sentence 8?**

- A replace espn with ESPN
- B replace NHL with nhl
- C replaced analyst with Analyst
- D no correction is necessary

A is the correct answer since ESPN is an acronym for Entertainment and Sport Programming Network.

**15. Sentence 10: Other Leagues, such as Major League Baseball and the National Basketball Association, have banned fighting, but brawling continues to occur.**

**Which correction should be made to sentence 10?**

- A replace Baseball with baseball
- B replace Other Leagues with Other leagues
- C replace Basketball with basketball
- D replace Major with major

**B is the correct answer since the word "leagues" does not refer to a specific league, so it should not be capitalized.**

## Lesson Plan Format for: Fingerprinting

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about fingerprinting and the significance of having fingerprints on file with the government.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Famous Twins: did you know that twins have the same DNA but not the same fingerprints?</li> <li>• What is fingerprinting all about? Why is it done? What types of jobs require it?</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• <b><u>"The Fingerprint Expert"</u></b>, short story, copy provided</li> <li>• How Does a Background Fingerprint Check Work?</li> <li>• The Basics of Fingerprint Science, copy provided</li> <li>• History of Fingerprinting</li> <li>• HiSET prep with Punnett squares, not included. Use personal test prep materials to get questions.</li> <li>• Political cartoon</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Show the political cartoon and ask the class what it means.</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Shade a dark spot of pencil on a piece of paper or get ink</li> <li>• Take a fingerprint of your thumb and pointer finger</li> <li>• Compare fingerprints with students around you</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question, copy provided</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Free write: how does it feel to know that your fingerprints are unique to you alone?</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Watch this: <a href="https://www.youtube.com/watch?v=ZxWXCT9wVol">https://www.youtube.com/watch?v=ZxWXCT9wVol</a></li> <li>• Are there legal ramifications for fingerprinting that necessitate that this practice continues?</li> </ul>

## Famous Twins

Do you know...?

Luke and Leia Skywalker

Fred and George Weasley

Quicksilver and Scarlet Witch

Chip and Dale

TweedleDee and TweedleDum

Hansel and Gretel

Mario and Luigi

Mary Kate and Ashley Olsen

Gisele and Patricia Bundchen

Vin and Paul Diesel

Ashton and Michael Kutcher

Scarlett and Hunter Johanssen

Alanis and Wade Morrissette

Keifer and Rachel Sutherland

Dylan and Cole Sprouse

Barbara Bush Pierce and Jenna Bush Hagen

Robin and Maurice Gibb

Mario and Aldo Andretti

Jose and Ozzie Canseco

John and Joan Elway

Theo and Paul Epstein

Jerry and Terry Hall

Linda and Leslie Hamilton

Marilu and Crystal Henner

Jim and Jenny Thome

Jim and Charlie Thorpe

Paul and Thaeleia Tsongas

Billy Dee Williams and his sister Loretta

Liberace was a twin and his twin died as an infant

Elvis Presley, his twin brother, Jesse, died at birth

Ed Sullivan, his twin brother, Daniel, died as an infant

## The Fingerprint Expert

Taken from: <http://www.lucindarush.com/fingerprintexpert.asp>

Before this story begins there are a few points I would like you to keep in mind- the fingerprints you are born with are yours for life. There is no such thing as a 90% match, with prints it is always a 100%, true there are matches that we know belong to the victim or the accused but they are useless in court, for instance if you are pushing an object prints get distorted and cannot be used in evidence. If someone throws an object there will be a peculiar kind of blurring to the print a strange wave pattern. Such prints are useless for identification purposes but, they reveal if something was hurled or thrown by the pattern of the smudging. And so they certainly tell me something.

### One Word Splash:

My story begins in the summer of 2008. My husband Mark and a group of friends, twelve of them in all, had a strong desire to leave a colder than usual England far behind. I found a house to rent in the Var region of France big enough for us all. We had some good times that summer, spending three weeks together talking late at night under the stars around the pool. By day, the sky was lilac and white the house was honey colored with shutters of cornflower blue. The topaz pool beckoned me to it every morning, at night it was lit and I loved giving my body to its dark inky water under a sky that held galaxies far away.

### One Word Splash:

One particularly warm day no one really wanted to go outside, even in the shade except for Don. He was a Michelin chef who had left work for a while to get treatment for his mobile phone phobias; he couldn't even bear to be in the room with one. He developed problems if someone even mentioned their phone, how difficult could that make life? I had known Don since our time together at senior school. He spent many hours that holiday outside in the shade making marinades and trying out new dishes on the bar b q to cook for us, usually singing too. I could tell he was getting better.

### One Word Splash:

Anyway, this particular day, Hannah, who was sitting across the old granite table in the kitchen reached over and picked up a piece of cheese with a fine skin on, being a fingerprint expert it was not unnatural for me to mention that I could lift an excellent print from the cheese. Others asked could I pick up their prints from the box of chocolates in the fridge "Yes of course" "What about from the depths of the pool?– Yes possibly I said, but not with the equipment I have here. I only had my basic kit with me (force of habit). Hannah set me a challenge " okay how about this for a holiday game, you go out of the room and we will each touch a chocolate , you can take our prints first and then your job is to identify who picked up which sweet – like a who done it'. Well I had the kit and my computer to check the matches from the chocolates to the prints and so took the challenge. I told them that the sweets would be dangerous to eat after I had

dusted them with my fluorescent powders and then left the room. They seemed impressed when I successfully identified everyone and even found a print that didn't belong to any of them – it belonged to Anna the pool cleaner.

**One Word Splash:**

One Friday, about six months later at work, a case came in from a particularly vicious rape, the victim's toes and fingers were broken in the attack and she was left traumatized and unable to describe the attacker or recount important details that could lead to the assailants' capture.

**One Word Splash:**

However a single finger print was found on her glasses that didn't belong to her. At work, we trawled our data base and linked up with others throughout the UK to try to identify the attacker with negative results. I had a particular interest in the case as the young girl was abducted from a bus stop just twelve miles from my home. Life is full of coincidences isn't it? And that is why one Saturday when I was alone in the house I took out the mini data base of fingerprints I had kept from that holiday in Var and checked all the male prints against the one found on the victims glasses. I'm still not sure why I did that, it seemed to take a nano second for the field to show Match, I breathed slowly as I clicked on the ID box and closed my eyes. I knew when I opened them the name of the person would be there. That group that I spent three weeks with in Var with were my friends some of them I had known since I was eleven years old, tears like glass splinters scratched my eyes. I blinked, and the name Mark Hutchinson flashed on and off in the ID box, my husband.

**One Word Splash:**

I heard his key turn in the lock downstairs; I turned around to wait until he came upstairs into the little office so that I could look at his eyes. Everything in the room and the house turned black and white; all color vanished as if by magic. He called up to me "Would you like to have tea in the garden? I have got some fresh Austrian apple cake from the new patisserie in the Great Western Arcade in town. As he walked slowly up the stairs, I turned towards the window. It was as if the clouds had flattened in the sky and dropped like giant buttermilk pancakes on the floor all around me.

**One Word Splash:**

**Crystal Ball:** what are our assumptions and what will happen next?

## **The Basics of Fingerprint Science**

The two fundamental principles of fingerprint identification are that fingerprints are permanent and unique: fingerprints never change and no two fingerprints are the same.

### **Take a Stand**

#### **Permanence:**

Fingerprints are formed before birth, and while they grow larger throughout a person's life, their basic structure remains constant. They can be temporarily obscured when the skin is damaged; but once healed, the ridges grow back in the exact same pattern. Even when a fingerprint is permanently scarred, there is almost always sufficient detail around the scar to allow for a positive identification.

### **Take a Stand**

#### **Uniqueness:**

Fingerprints are made up of skin ridges - or friction ridges - that have unique pattern formations. Examiners are able to evaluate and compare the flow or ridges, the relationship between ridge endings (or minutiae points), and other details to make an identification. Besides being unique in fingerprints, ridge detail is also unique in the palms of hands and the soles of feet.

### **Take a Stand**

#### **Fingerprints vs. DNA**

Both fingerprint identification and DNA analysis have proved to be valuable tools for personal and criminal identification. However, fingerprint identification can be more accurate than DNA analysis. Even identical twins that look exactly alike and have the same DNA structure will always have different fingerprints! This is because fingerprints are formed in the womb, where movements and natural growth randomly create the characteristics.

### **Take a Stand**

Taken from: <http://www.kingcounty.gov/safety/sheriff/Enforcement/AFIS/Fingerprinting.aspx>

## How Does A Fingerprint Background Check Work?

Written [J. Hirby](#) and Fact Checked by The Law Dictionary Staff

Over the span of your lifetime, the local, state and federal governments will accumulate plenty of [information](#) detailing your family, education, housing and crime records. More organizations are performing a fingerprint [background check](#) for housing or employment. This is how a fingerprint background check works.

### Federal Bureau of Investigation (FBI) Stores Fingerprints

The federal government has many sources for collecting fingerprints, including processes from citizenship, employment, arrests and military service. Any data collected through written forms or spoken answers will be listed in your fingerprint background check. The most complete records linked to these fingerprints is stored with the Federal Bureau of Investigation (FBI). Just like your social security number, your finger prints are used by the government to track information about YOU.

When an organization wants your fingerprint background check for adoption, overseas travel, employment, licensing or housing, it can make the request from a state identification bureau, FBI channeler or the FBI directly itself. It must have legal authority to access these personal records.

Your fingerprints identify all relevant information in your life: birth, name, addresses, employment and arrests. The Federal Bureau of Investigation (FBI) fingerprint database will include your "rap sheet" consisting of any criminal arrest dates, charges and the disposition of cases.

Many times, a simple police report can be linked to these fingerprint records also. This could include vehicle accidents, insurance information and statements you made.

Taken from: <http://thelawdictionary.org/article/how-does-a-fingerprint-background-check-work/>

### **Choose 1 essay topic and use information from above to write your argumentative essay.**

The FBI holds records on every individual and uses this information to track you as an individual. What are the justifying reasons for government to do this?

The FBI holds records on every individual and uses this information to track you as an individual. Certain jobs require a background check. Is this a reasonable course of action and why?

## History of Fingerprinting

Retrieved from <http://science.howstuffworks.com/fingerprinting3.htm>

There are records of fingerprints being taken many centuries ago, although they weren't nearly as sophisticated as they are today. The ancient Babylonians pressed the tips of their fingertips into clay to record business transactions. The Chinese used ink-on-paper finger impressions for business and to help identify their children.

However, fingerprints weren't used as a method for identifying criminals until the 19th century. In 1858, an Englishman named Sir William Herschel was working as the Chief Magistrate of the Hooghly district in Jungipoor, [India](#). In order to reduce fraud, he had the residents record their fingerprints when signing business documents.

A few years later, Scottish doctor Henry Faulds was working in [Japan](#) when he discovered fingerprints left by artists on ancient pieces of clay. This finding inspired him to begin investigating fingerprints. In 1880, Faulds wrote to his cousin, the famed naturalist Charles Darwin, and asked for help with developing a fingerprint classification system. Darwin declined, but forwarded the letter to his cousin, Sir Francis Galton.

Galton was a eugenicist who collected measurements on people around the world to determine how traits were inherited from one generation to the next. He began collecting fingerprints and eventually gathered some 8,000 different samples to analyze. In 1892, he published a book called "Fingerprints," in which he outlined a fingerprint classification system -- the first in existence. The system was based on patterns of arches, loops and whorls.

Meanwhile, a French law enforcement official named Alphonse Bertillon was developing his own system for identifying criminals. Bertillonage (or anthropometry) was a method of measuring heads, feet and other distinguishing body parts. These "spoken portraits" enabled police in different locations to apprehend suspects based on specific physical characteristics. The British Indian police adopted this system in the 1890s.

Around the same time, Juan Vucetich, a police officer in Buenos Aires, [Argentina](#), was developing his own variation of a fingerprinting system. In 1892, Vucetich was called in to assist with the investigation of two boys murdered in Necochea, a village near Buenos Aires. Suspicion had fallen initially on a man named Velasquez, a [love](#) interest of the boys' mother, Francisca Rojas. But when Vucetich compared fingerprints found at the [murder scene](#) to those of both Velasquez and Rojas, they matched Rojas' exactly. She confessed to the crime. This was the first time fingerprints had been used in a criminal investigation. Vucetich called his system comparative dactyloscopy. It's still used in many Spanish-speaking countries.

Sir Edward Henry, commissioner of the Metropolitan Police of London, soon became interested in using fingerprints to nab criminals. In 1896, he added to Galton's



technique, creating his own classification system based on the direction, flow, pattern and other characteristics of the friction ridges in fingerprints. Examiners would turn these characteristics into equations and classifications that could distinguish one person's print from another's. The Henry Classification System replaced the Bertillonage system as the primary method of fingerprint classification throughout most of the world.

In 1901, Scotland Yard established its first Fingerprint Bureau. The following year, fingerprints were presented as evidence for the first time in English courts. In 1903, the New York state prisons adopted the use of fingerprints, followed later by the [FBI](#).

1. The first culture to use fingerprinting for various reasons was the \_\_\_\_\_.
  - a. Romans
  - b. Chinese
  - c. Babylonian
  - d. Greeks
  
2. In the \_\_\_\_\_ century, fingerprints were used to identify criminals.
  - a. 18<sup>th</sup>
  - b. 19<sup>th</sup>
  - c. 20<sup>th</sup>
  - d. 21<sup>st</sup>
  
3. Dr. Henry Faulds' cousin was \_\_\_\_\_.
  - a. Charles Dickens
  - b. Charles Darwin
  - c. Sir Edward Henry
  - d. Alphonse Bertillon
  
4. Sir Francis Galton gathered \_\_\_\_\_ samples of fingerprints.
  - a. 6,000
  - b. 7,000
  - c. 8,000
  - d. 9,000
  
5. \_\_\_\_\_ is a "a method of measuring heads, feet and other distinguishing body parts."
  - a. Necochea
  - b. Dactyloscopy
  - c. Bourdoir
  - d. Bertillonage

## Answer Key

1. The first culture to use fingerprinting for various reasons was the \_\_\_\_\_.
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### Math Challenge

High School Equivalency Test Preparation, Mathematics. **Paxen, 2014**, Page 29, question 18.

**There are 30 full time and 12 part time employees at the adult education center. What is the ratio of full time to part time employees?**

- A 2:1
- B 5:2
- C 3:1
- D 7:2
- E 4:1

#### Extension

**Of the 30 full time employees, 24 have had their fingerprints done. What is the ratio of those employees who have had their fingerprints done?**

**Who have not?**

**Of the 12 part time employees, 7 have had their fingerprints done. What is the ration of those employees who have had thire fingerprints done?**

**Who have not?**

## Math Challenge Answer Key

High School Equivalency Test Preparation, Mathematics. **Paxen, 2014**

Page 29, question 18.

**There are 30 full time and 12 part time employees at the adult education center. What is the ratio of full time to part time employees?**

- A 2:1**
- B 5:2**
- C 3:1**
- D 7:2**
- E 4:1**

B is the correct answer since the ratio of full time to part time is 30:12 or 15:6 or 5:2

### Extension

**Of the 30 full time employees, 24 have had their fingerprints done. What is the ratio of those employees who have had their fingerprints done?**

30:24 or 5:6

**Who have not?**

30:6 or 5:1

**Of the 12 part time employees, 7 have had their fingerprints done. What is the ration of those employees who have had their fingerprints done?**

12:7

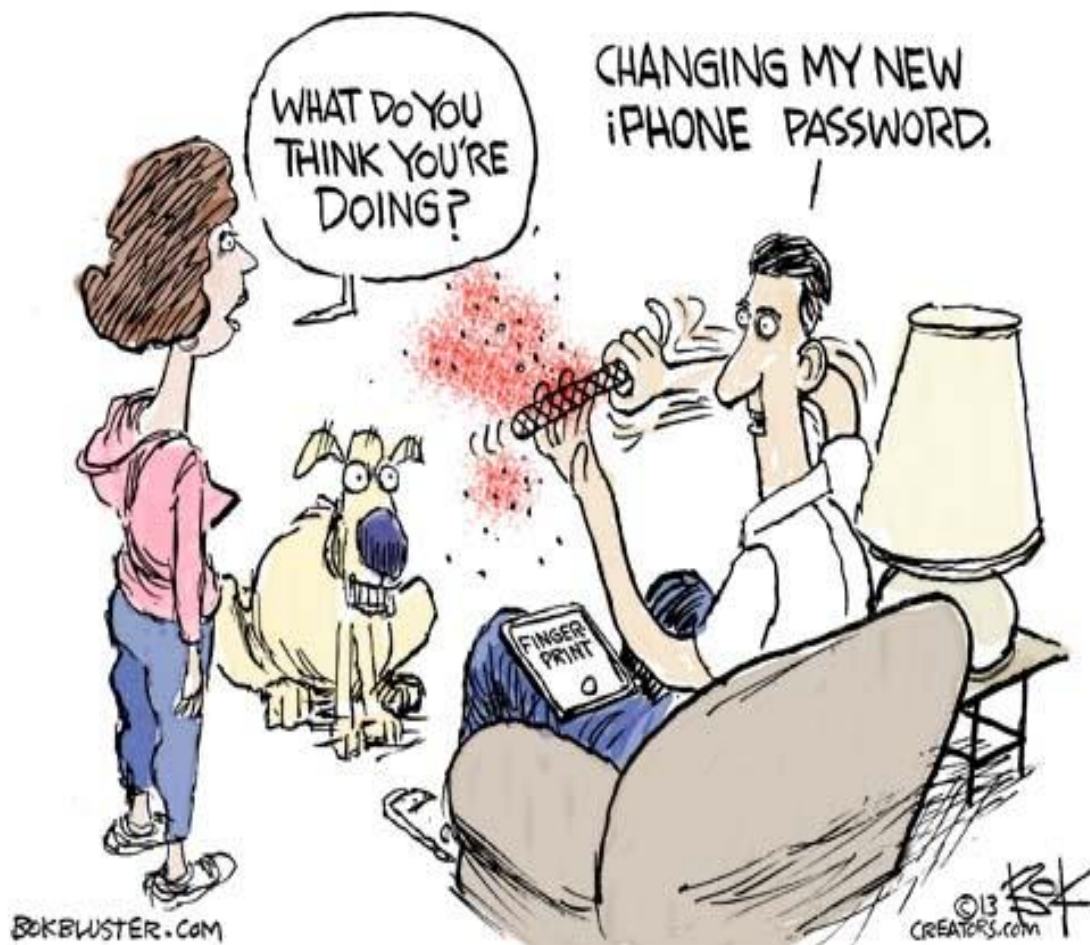
**Who have not?**

12:5

Group Discussion for Application to Real World Applications

What is this man doing?

Why is he doing this?



## Lesson Plan for: Germs, Viruses and Bacteria

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 1 (Reading): Read closely to determine what the text says explicitly and not make logical inferences from it.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students understand what germs, viruses and bacteria are and how it can impact their overall health.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Begin the lesson by talking about the topic in general. Get feedback from the class.</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• What are Bacteria, Viruses and Germs?, article provided</li> <li>• 10 Everyday Places That Harbor Germs, article provided</li> <li>• Essay on germs and bacteria, copy provided</li> <li>• Political cartoon, copy provided</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Use Stop! Draw! to see how much students know about the topic.</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of think aloud strategy, embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of modeling of think aloud strategy</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Political cartoon</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Watch this video: Ten Terrifying Bio Weapons, <a href="https://www.youtube.com/watch?v=Z4iP9IHg_9Q">https://www.youtube.com/watch?v=Z4iP9IHg_9Q</a></li> <li>• Do you think this is possible?</li> </ul>

## What are Bacteria, Viruses and Germs?



Taken from: [http://biology.about.com/od/microbiology/ss/10-Everyday-Objects-That-Harbor-Germs.htm?utm\\_content=20151007&utm\\_medium=email&utm\\_source=cn\\_nl&utm\\_campaign=todaysl&utm\\_term](http://biology.about.com/od/microbiology/ss/10-Everyday-Objects-That-Harbor-Germs.htm?utm_content=20151007&utm_medium=email&utm_source=cn_nl&utm_campaign=todaysl&utm_term)

[Bacteria](#), [viruses](#), and other germs are everywhere. They are [on your skin](#) and even inside of you. Germs are on everyday objects that you encounter in your house, at the store, or on your way to work. We may not give some of these items a second thought, but should probably consider how many germs actually live on them.

Bacteria are [prokaryotic organisms](#). Prokaryotes are single-celled organisms that are the earliest and most primitive forms of life on earth. Prokaryotes are able to live and thrive in various types of environments including extreme habitats such as hydrothermal vents, hot springs, swamps, wetlands, and the guts of animals.

### Think aloud: what are prokaryotic organisms?

Bacteria [reproduce asexually](#), which means that one individual produces offspring that are genetically identical to itself. These offspring are produced by [mitosis](#). [Mitosis](#) is the phase of the [cell cycle](#) where [chromosomes](#) in the [nucleus](#) are evenly divided between two cells. When the cell division process is complete, [two daughter cells](#) with identical genetic material are produced.

### Think aloud: what does it mean to reproduce asexually?

### Think aloud: what is mitosis?

**Question to Ponder:** Based on what you know of germs, bacteria and viruses, where do you think is the “germiest” place, item etc.

Watch this video to see if you were right.

<https://www.youtube.com/watch?v=48A6Z3ZdK7c>

## 10 Everyday Places That Harbor Germs



### 1. Germs on Your TV Remote

Most people don't consider their TV remote to be a potential vehicle for the transfer of [bacteria](#) and [viruses](#). This item is used every day and touched by many hands that may be contaminated with food, mucous, fecal matter, urine, or dirt. Remotes are often dropped on the floor, lost in the couch, or end up in the mouth of the family pet. Germs can survive on TV remote surfaces for several hours. With that in mind, it is essential that your TV remote be cleaned often with alcohol-free disinfectant wipes. Don't forget about cleaning those TV remotes in hotels, hospitals, or other public areas before touching them. [Washing and drying your hands](#) after using a TV remote can also prevent the spread of germs.

**Reading comprehension question:** how long can germs live on TV remote surfaces?

### 2. Microbes on Your Handbag or Wallet

It seems our purses or wallets carry more than our money. A British study found that handbags were contaminated with more bacteria than a toilet seat. These items become contaminated as bacteria or viruses are transferred to them through contact with things in the environment. Germs can be transferred from our hands to our purses or wallets. Women also tend to place purses on floors or on the ground. Germs from money can contaminate the inside of a wallet or handbag. In order to reduce bacteria on these items, it is recommended that you wash your hands regularly and clean your handbags or wallets with antibacterial wipes.

**Reading comprehension question:** what item is less contaminated than a wallet or handbag?

### 3. Pathogens on Your Cell Phone

A study conducted in the United Kingdom has raised some eyebrows concerning hand washing habits. It revealed that one in six mobile phones tested in Britain was contaminated with bacteria from fecal matter. Properly washing and drying your hands is one of the best preventative measures against contracting bacteria related illnesses and other infectious



disease. Sixteen percent of phones tested in the study were found to contain *E. coli* bacteria which are responsible for various stomach and digestive system ailments. The study also revealed that when asked, people were more likely to not be truthful about their hand washing habits. In spite of the fact that **95%** of the people reported washing their hands properly, **92%** of phones and **82%** of hands were found to be contaminated with bacteria. To keep your phone clean it is recommended that you wipe it with alcohol-free disinfectant wipes and remove fingerprints with a microfiber cloth.

**Reading comprehension question:** what bacteria is responsible for various stomach and digestive system ailments?

**Place the percentages in order of largest to smallest percent.**

#### **4. Kitchen Sponge Dirtier Than a Toilet Seat**

Studies have revealed that the kitchen sponge is among the dirtiest of household items. A kitchen sponge contains more germs than a toilet seat or garbage can. Not only do bacteria and viruses grow on sponges readily, but these germs are easily spread when we use contaminated sponges to wipe plates, counters, and other kitchen surfaces. Sponges are often contaminated with *E. coli*, *Salmonella*, and other bacteria that cause food poisoning. Sponges can be sanitized by rinsing them in water and microwaving them for two minutes or cleaning them in a dishwasher. They can also be placed in a water bleach solution for a minute, rinsed, and allowed to dry. You should be sure to wash your hands after cleaning dirty sponges. Kitchen sponges should be replaced often.

**Reading comprehension question:** how do you sanitize a sponge?

#### **5. Bugs on Your Shopping Cart**

It is definitely a good idea to use those sanitizing wipes at the grocery store to wipe down your shopping cart. Studies have shown that shopping carts are contaminated with [E. coli](#) and fecal related bacteria. These germs are capable of causing [bacteria related illnesses](#). The types of bacteria found on shopping carts indicate that people are not properly [washing and drying their hands](#) after using the rest room facilities.

**Reading comprehension question:** what is the first thing you should do when you get a shopping cart at the grocery store?

## 6. How Dirty is Your Toothbrush?

Researchers estimate that as many as 10 million bacteria live on your toothbrush at any time. These bacteria include *E. coli*, oral bacterial species, skin bacteria, and *Staphylococcus*. Since most toothbrushes are stored in the bathroom, they can become contaminated with germs spread from the toilet being flushed. If a toothbrush is stored in an airtight container, germs can quickly grow in the damp environment. To help keep your toothbrush clean, rinse after brushing and soak the bristles in an antiseptic mouthwash. Store your toothbrush in a place where it is exposed to air and be sure to close the toilet lid before flushing. It also a good idea to replace your toothbrush every three to four months.

**Reading comprehension question:** how should you clean your toothbrush?

**How many days in three months if we are counting March, April and May?**

**How many days in four months if we are counting November, December, January, and February?**

## 7. Contagions at the Gas Pump

A study conducted by Kimberly-Clark's Healthy Workplace Project has identified gas pump handles as the dirtiest items we encounter on a daily basis. These handles are not cleaned and thus become breeding grounds for bacteria and viruses. Disease causing germs can be transferred from pump handles to our hands and along to others through skin contact. It is recommended that you use disinfectant wipes to wipe down a gas pump handle before pumping gas. You should also wash your hands with soap and water or clean your hands with an alcohol-based hand sanitizer as soon as possible after pumping gas.

**Reading comprehension question:** what study identified that gas pump handles are the dirtiest items we encounter on a daily basis?

## 8. Mailboxes Deliver Disease

We check our mailboxes frequently but don't think of this task as a risk for picking up germs. A study conducted by Kimberly-Clark's Healthy Workplace Project has identified mailbox handles as runner up to gas pump handles as the dirtiest items we encounter on a daily basis. Mailbox handles are populated with bacteria and viruses that can be transferred through contact with the skin. Disinfectant wipes should be used to clean your mailbox. Washing your hands with soap and water after checking the mail is also recommended.

**Reading comprehension question:** what has more germs, mailbox handles or gas pumps?

## 9. Bacteria on Contact Lenses

Bacteria that grow on contact lenses can cause a serious eye infection called bacterial keratitis. In bacterial keratitis, bacteria infect corneal cells causing scarring and even blindness. Normally, bacteria are removed naturally from the eye by the process of blinking. If the eye is covered by a contact lens however, blinking is ineffective at removing bacteria that are between the contact lens and the eye. Bacterial keratitis is typically caused by the germs *Staphylococcus aureus* and *Pseudomonas aeruginosa*. These bacteria can grow on contact lenses that are not disinfected properly, lenses that are rinsed or stored in water, or lenses that are stored in cases that are not cleaned properly. To prevent bacteria buildup on contact lenses, the Centers for Disease Control and Prevention (CDC) recommends that you wash and dry your hands properly before touching your contact lenses. You should not sleep in your contact lenses or wear them while showering or swimming.

**Reading comprehension question:** what eye infection can occur when wearing contact lenses?

## 10. Bacteria on Your Flight

Two dangerous types of bacteria, methicillin-resistant *Staphylococcus aureus* (MRSA) and *E. coli*, are able to survive on airplane cabin surfaces for as long as a week. Researchers tested several surfaces including armrests, plastic tray tables, and cloth and leather seat pockets. When the surfaces were exposed to bacteria under conditions similar to those on an airplane, the bacteria were able to survive for days.

MRSA and *E. coli* can cause serious illness if a person becomes infected by these germs. They can be transmitted to people through surface to skin contact. The best defense against these and other germs is to wash your hands with soap and water or clean them with an alcohol-based hand sanitizer. After touching surfaces on a plane, avoid touching your face until you can properly clean your hands.

**Reading comprehension question:** how long can bacteria live on an airplane's arm rest?



The bacteria streptococci contain a variety of species, each with its particular effect. For example, *Streptococcus pyogenes*, or Group A streptococcus bacterias, can cause diseases from tonsillitis to scarlet fever. Other forms of streptococci can result in tooth decay, sinus infections, meningitis, or pneumonia. However, some forms of streptococci aid in the production of butter, yogurt, and certain cheeses.

Which detail supports the main idea that streptococci have both different species and effects?

- A *Streptococcus pyogenes* can cause diseases ranging from tonsillitis to scarlet fever.
- B Streptococci can cause sinus infections.
- C Tooth decay can be a result of a streptococcus bacterium.
- D Some forms of streptococci can cause disease, while others help produce foods.

Self-reflection: what do you know about the diseases listed above?

HiSET Science Question, page 23, question 3

Answer Key

High School Equivalency Test Preparation

Paxen, 2014

The bacteria streptococci contain a variety of species, each with its particular effect. For example, *Streptococcus pyogenes*, or Group A streptococcus bacterias, can cause diseases from tonsillitis to scarlet fever. Other forms of streptococci can result in tooth decay, sinus infections, meningitis, or pneumonia. However, some forms of streptococci aid in the production of butter, yogurt, and certain cheeses.

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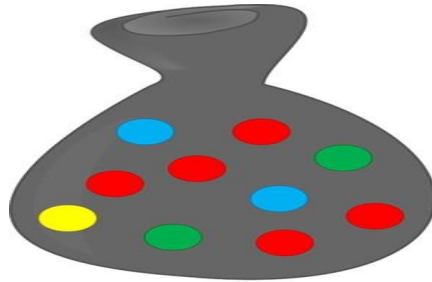
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- B Streptococci can cause sinus infections.
- C Tooth decay can be a result of a streptococcus bacterium.
- D Some forms of streptococci can cause disease, while others help produce foods.

D is the correct answer because this statement describes two different effects of different types of bacteria.

Self-reflection: what do you know about the diseases listed above?

### Math Challenge

High School Equivalency Test Preparation, Mathematics, Student Edition. **Paxen, 2014.** Question is based on page 133, question 11



If the blue marbles are signifying smallpox, the red marbles signifying measles, the yellow marbles signifying chicken pox and the green signifying mumps, what is the probability of getting:

Smallpox

Measles

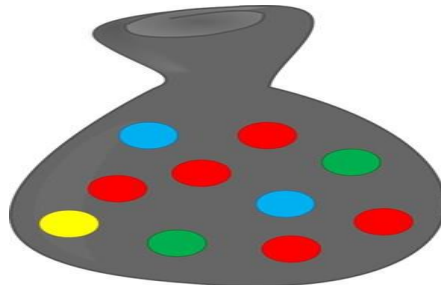
Chicken pox

Mumps

\*\*\*\*\*

### Math Challenge Answer Key

High School Equivalency Test Preparation, Mathematics, Student Edition. **Paxen, 2014.** Question is based on page 133, question 11



If the blue marbles are signifying smallpox, the red marbles signifying measles, the yellow marbles signifying chicken pox and the green signifying mumps, what is the probability of getting:

Smallpox      2:10 or 1:5

Measles        5:10 or 1:2

Chicken pox   1:10

Mumps         2:10 or 1:5

## Self-Reflection



Image taken from: <http://www.politicalcartoons.com/cartoon/78ff5977-11f3-470f-89f3-122a569f7455.html>

Can vacationing truly be a hazard to your health?



## Lesson Plan Format for: Phases of the Moon

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about phases of the moon, (especially when they eat Oreos!)</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Use quotes from <b><u>Star Wars</u></b> to get students to be thinking about space.</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Quotes from <b><u>Star Wars</u></b>, copy provided</li> <li>• Is it <b><u>Star Wars</u></b> or true space photos?</li> <li>• Phases of the Moon, Find the Error, copy provided</li> <li>• Phases of the Moon, Find the Error, answer key, copy provided</li> <li>• Oreo project, copy provided</li> <li>• Essay, Do or Do Not, copy provided</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Various photos of <b><u>Star Wars</u></b> characters intermingled with true space photos.</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Take notes with the mini notebooks (hot dog booklets) while reading Find the Error</li> <li>• Use of the Oreo project</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question, copy provided</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Political cartoon, copy provided</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Cup stacking of planets from our solar system</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Exit ticket: Why do we need to know about space? Is it truly the "final frontier"?</li> </ul>

**Star Wars or True Space?**



**What is this?**

Image taken from:  
<https://en.wikipedia.org/wiki/Moon>





**What is this?**

Image taken from:  
<https://www.pinterest.com/ricodetroit/fearth-class-terrestrial-planets/>

**Your turn: use your devices and challenge others to decide if the image is of our solar system or that of the Star Wars universe.**

Our Solar System	Star Wars Universe
Mercury	Coruscant
Venus	Naboo
Earth	Tatooine
Mars	Hoth
Jupiter	Jakku
Saturn	Ryloth
Neptune	Felucia
Uranus	Bespin
Planet Nine, formerly Pluto	Corelia

**Star Wars or True Space? Answer Key**

 <p><b>What is this?</b></p> <p><b>Our Moon</b></p> <p>Image taken from:  <a href="https://en.wikipedia.org/wiki/Moon">https://en.wikipedia.org/wiki/Moon</a></p>	 <p><b>What is this?</b></p> <p><b>Planet Kashyyk, where Chewbacca comes from</b></p> <p>Image taken from:  <a href="https://www.pinterest.com/ricodetroit/fearth-class-terrestrial-planets/">https://www.pinterest.com/ricodetroit/fearth-class-terrestrial-planets/</a></p>
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Uranus	Bespin
Planet Nine, formerly Pluto	Corelia

### Star Wars Sentence Scramble

moon...that's / is / saying, / Kenobi / a / for / Obi-Wan / station." /  
"That's / space / no / famous

on / four / which / two / moons. / Tatooine / lives / planet / and /  
Luke / has / Skywalker / the / suns

forest / moon / furry / planet / of / The / live / Star / Wars, / in /  
Endor. / Ewoks, / creatures / the / the / on

the / Star / targeting / Death / planet / fourth / was / The / moon /  
Yavin. / of / the

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### Star Wars Sentence Scramble Answer Key

Obi-Wan Kenobi is famous for saying, "That's no moon...that's a space station."

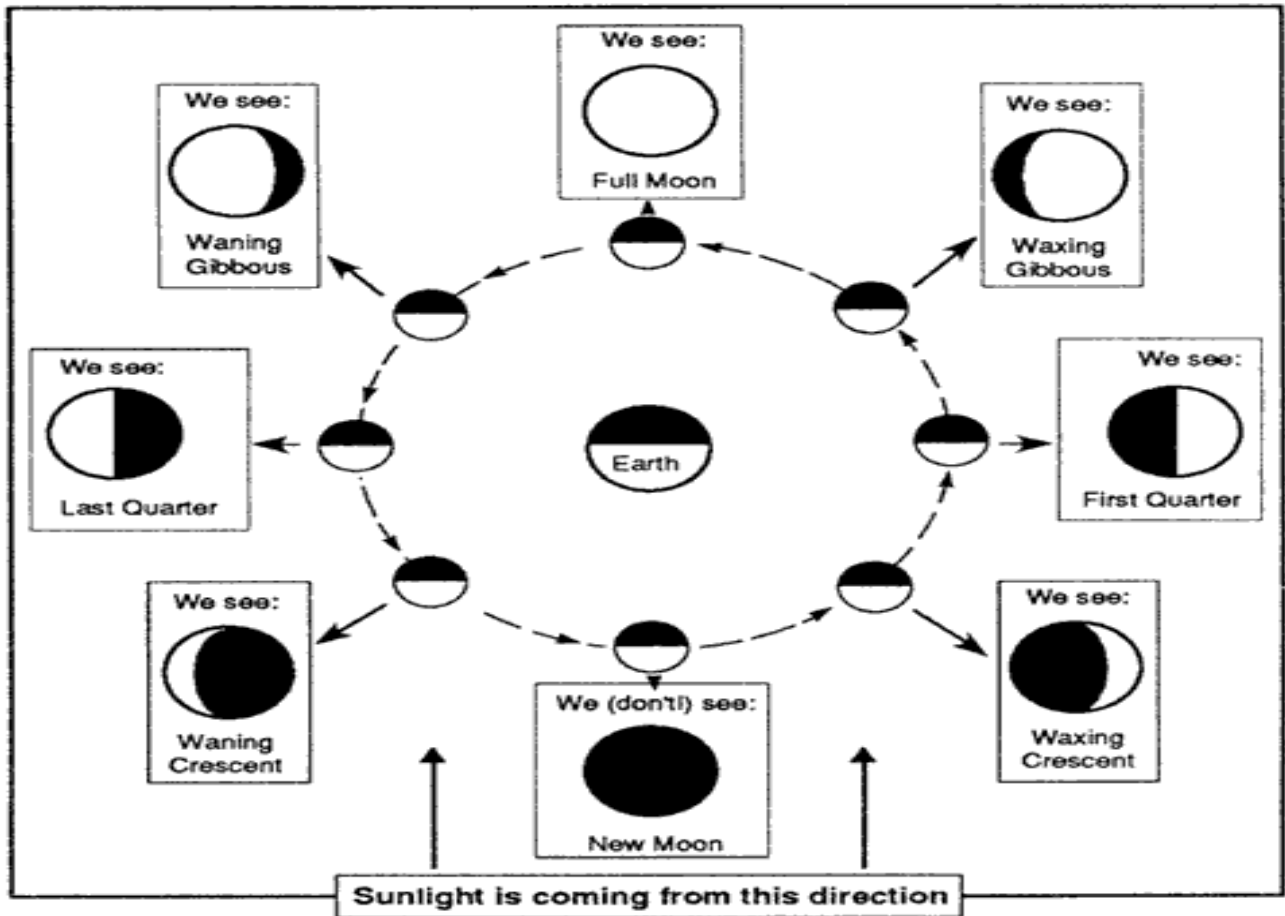
Luke Skywalker lives on the planet Tatooine which has two suns and four moons.

The Ewoks, furry creatures in Star Wars, live on the forest moon of the planet Endor.

The Death Star was targeting the fourth moon of the planet Yavin.

## Phases of the Moon

### Find the Error



### The Moon: It's Just a Phase It's Going Through...

Our planet's large **natural** satellite, the Moon, is the easiest (and cheapest!) astronomical object to observe. The only "scientific instrument" **you'll** need at first is a pair of eyes. The Moon is the only thing in the sky (other than the Sun) that doesn't look like just a pinpoint of light or an indistinct fuzzy patch as seen with the unaided eye. **even** better, the way the Moon looks to us is continually changing; keeping track of its appearance from night to night (or day to day) is a fascinating and easy way to get acquainted with the rhythms of change in the **Sky**.

### The Moon's Orbit

The Moon *orbits* around the Earth, taking about a month to go all the way around our planet. **It's** orbit is very nearly circular; it stays about 380,000 kilometers away from us as it moves counterclockwise (as viewed from a northern hemisphere perspective). It also stays **fairly** close to the Earth's *equatorial plane* (an imaginary extension of Earth's

equator out into space); the point on the Earth directly under the Moon is never more than 29° north or south of the **Equator**.

### Demonstrating the Moon's Motion

Over the millenia, the Moon has become "locked" into a special kind of motion around the Earth. It rotates on its axis at the same pace as it revolves around the Earth. As a result, the Moon keeps the same face toward us **through out** its orbit.

### Phases of the Moon

Since the Moon shines by reflecting sunlight, what it looks like to us at any particular time depends on the **angel** at which the Sun's light is hitting the Moon. For example, if sunlight is coming from the right, the right half of the Moon's globe will be bright and the left will be dark. If sunlight is coming from behind the Moon as we look at our satellite, then its **farside** will be illuminated, and we will see a dark globe or "new moon."

#### New Moon



At *new moon*, the Sun and the Moon are quite close to each other in the sky. (In fact, the Moon in its new phase will sometimes block all or part of **out** view of the Sun. This event is called a *solar eclipse*. The side toward us is in shadow and is dark. **Moreover**; since the Moon and Sun are so near each other on the sky, they are above the horizon at the same time. Thus the Moon is only in the sky during the day, when the sky is bright-- which means a new moon cannot be seen from Earth!

#### Waxing Crescent



As time passes after new moon, the Moon--orbiting counterclockwise around the Earth--moves away from the Sun toward the east from our vantage point as seen from Earth's northern hemisphere. Two or three days after new moon, a *waxing crescent* can be seen just to the east (left) of the Sun. It is most easily seen just after sunset, following the Sun closely down toward the **Western Horizon**. Notice that the "horns" of a crescent moon always point away from the Sun (alternatively, you can think of a crescent moon as a bow about to shoot an arrow toward the Sun).

#### First Quarter



About a week after new moon, the Moon has moved about 90 degrees away from the Sun, a quarter of the way around the sky toward the east (left). At this time, its right-hand half is illuminated by sunlight. This phase is called *first quarter* because it occurs

when the Moon has completed the first quarter of its orbit from the previous new moon phase. During first quarter and waxing gibbous phases, the Moon is quite easily seen in the blue eastern sky on a clear afternoon. **Its** also easy to see in the western sky on clear mornings at waning gibbous and last quarter phases.

### Waxing Gibbous

During the following week, the Moon continues to further distance itself from the Sun toward the East by about 12 degrees per day. As it does so, it waxes "fatter" as more and more of the side facing us is illuminated by sunshine. This phase is called *waxing gibbous*.

### Full Moon

When the Moon has completed exactly half of its trip around the Earth from the previous new moon, it is on the opposite side of the Earth from the Sun; the face toward us is fully illuminated, and *full moon* has arrived.

Strictly speaking, "full moon" occurs only for an instant: the time when the Moon is as nearly opposite the Sun on the sky as it will be during its current orbit. **however**, the Moon will look only imperceptibly different from full for a night or two around that time.

The Moon's orbit around the Earth is tilted by about 5 degrees relative to our planets orbit around the Sun. This means that full moon doesn't always bring the Sun, Earth and Moon into *perfect* alignment. If it did, the Moon would move directly into the Earth's **shadow, which extend** straight back, away from the Sun, at full moon. This does happen occasionally though; the phenomenon is **call** a *lunar eclipse*.

Near the time of full phase, the Moon is opposite the Sun; thus it rises around sunset, is high in the sky around midnight, and sets around sunrise, providing light that's bright enough to read by all night long when the weather is clear.

### Waning Gibbous

During a week after full moon, as the Moon continues to move eastward in its **Orbit** about 12 degrees per day, the Moon rises later and later and the side we see is illuminated by less and less sunlight — its light wanes. While the Moon is in this *waning gibbous* phase, its east (left) side remains fully **sunlight**, while darkness creeps in from the right. As the Moon moves farther toward the east from night to night the Earth has to turn a little farther toward the east each night for us to see it. On the average, the Moon rises about 50 minutes later each night, but this can vary significantly depending on the time of year and your latitude north or south of the equator.

## Last Quarter

As *last quarter phase* — when the Moon enters the last quarter of its orbit back to new moon — the eastern (left) half of its disk is illuminated. Now, the Moon has moved to 90 degrees west of the Sun, and precedes it by about 6 hours in their daily race across the sky: first quarter moon rises at about **mid night**, is highest in the sky at sunrise, and sets at about noon. Thus, the last quarter Moon is easy to see in the western sky on clear mornings.

## Waning Crescent

Finally, during the last week of its monthly orbit the Moon draws closer and closer to the Sun on the sky, approaching it from the west (right). The *waning crescent's* horns extend toward the west, away from the Sun, and add a pretty touch to the pre-sunrise sky, low in the east.

A day or two after this phase, the Moon will be new again, and the cycle begins anew...

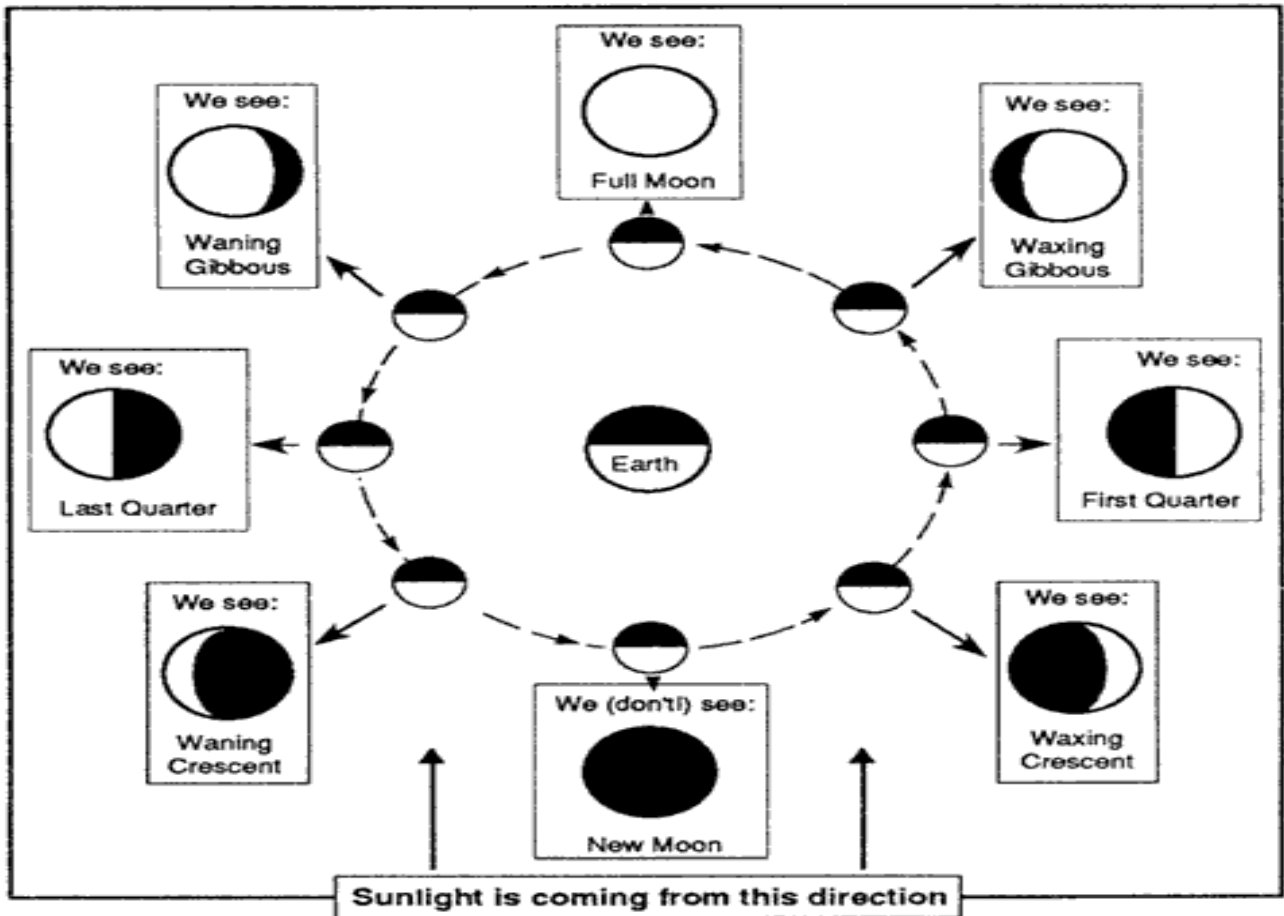
Taken from: <https://astrosociety.org/edu/publications/tnl/12/12.html>



## Phases of the Moon

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Answer Key



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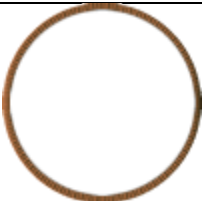



Taken from: <https://astrosociety.org/edu/publications/tnl/12/12.html>

## Oreo Moon Phases

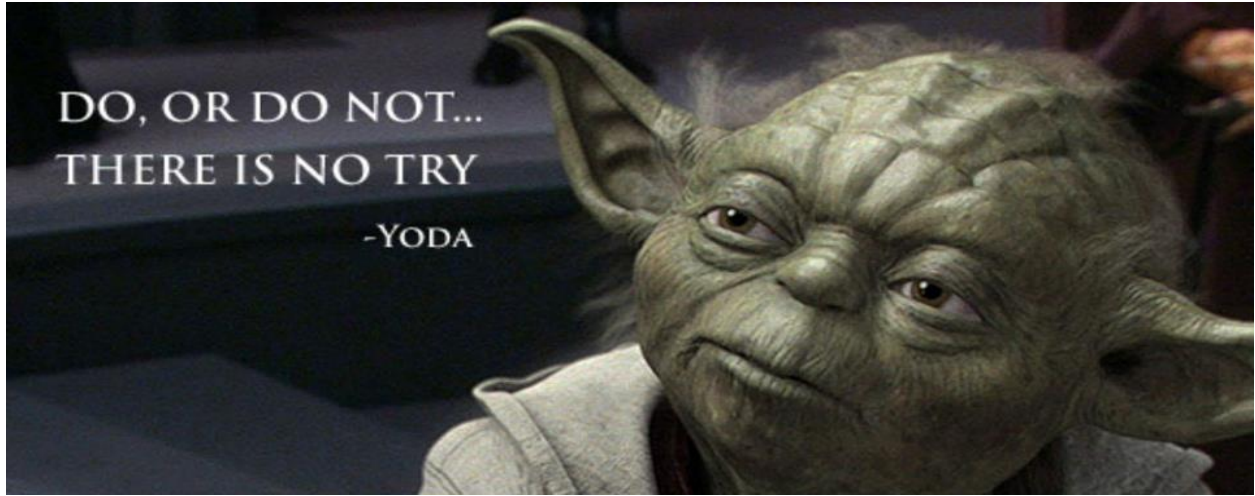
**Materials:**

- 8 Oreo® cookies
- Paper towel
- A plastic spoon and/or a plastic knife
- Marker (optional)

Halve and scrape Oreo® cookies to illustrate Moon phases. Then arrange cookies on the poster in linear fashion beginning with the New Moon and ending with the Waning Crescent Moon. You may be familiar with other activities that place the phases in a circular formation.

<p><b>1</b></p>  <p><b>New Moon</b> Completely (or almost completely) dark.</p>	<p><b>2</b></p>  <p><b>Waxing Crescent</b> A small sliver of light on the right.</p>	<p><b>3</b></p>  <p><b>First Quarter (or Half) Moon</b> The right half of the Moon is light.</p>
<p><b>4</b></p>  <p><b>Waxing Gibbous</b> Three quarters of the right side of the Moon is light. The light is in the shape of a humpback (which is what the word "gibbous" means!)</p>	<p><b>5</b></p>  <p><b>Full Moon</b> The entire Moon is bright.</p>	<p><b>6</b></p>  <p><b>Waning Gibbous</b> Three quarters of the <b>left</b> side of the Moon is light.</p>
<p><b>7</b></p>  <p><b>Third Quarter (also Half) Moon</b> The <b>left</b> half of the Moon is now light.</p>	<p><b>8</b></p>  <p><b>Waning Crescent</b> A small sliver of light now appears on the <b>left</b> side.</p>	<p>Modified from <a href="#">Paper Plate Education</a> Copyright ©2006 <a href="#">Chuck Bueter</a> All rights reserved.</p>

**“Do or do not. There is no try.” ~Master Yoda  
Essay**



Please watch at: <https://www.youtube.com/watch?v=7YkbgvRMpW0>  
(4.44 minutes)

Do you believe that Master Yoda has the right idea when he tells Luke Skywalker, "Do or do not. There is no try"? What is the hidden meaning between such two simple sentences of a total of 8 words? Do you believe that Yoda is encouraging Luke to commit fully to the task at hand? Do you need to be 100% certain in what you are doing to succeed? Do you think that Yoda had it right in thinking that a person cannot give only half effort? Do people need to have true conviction in whatever it is that they are committing to for success? Think of the above questions to shape your answer to the above statement posed by Yoda, "Do or do not. There is no try."

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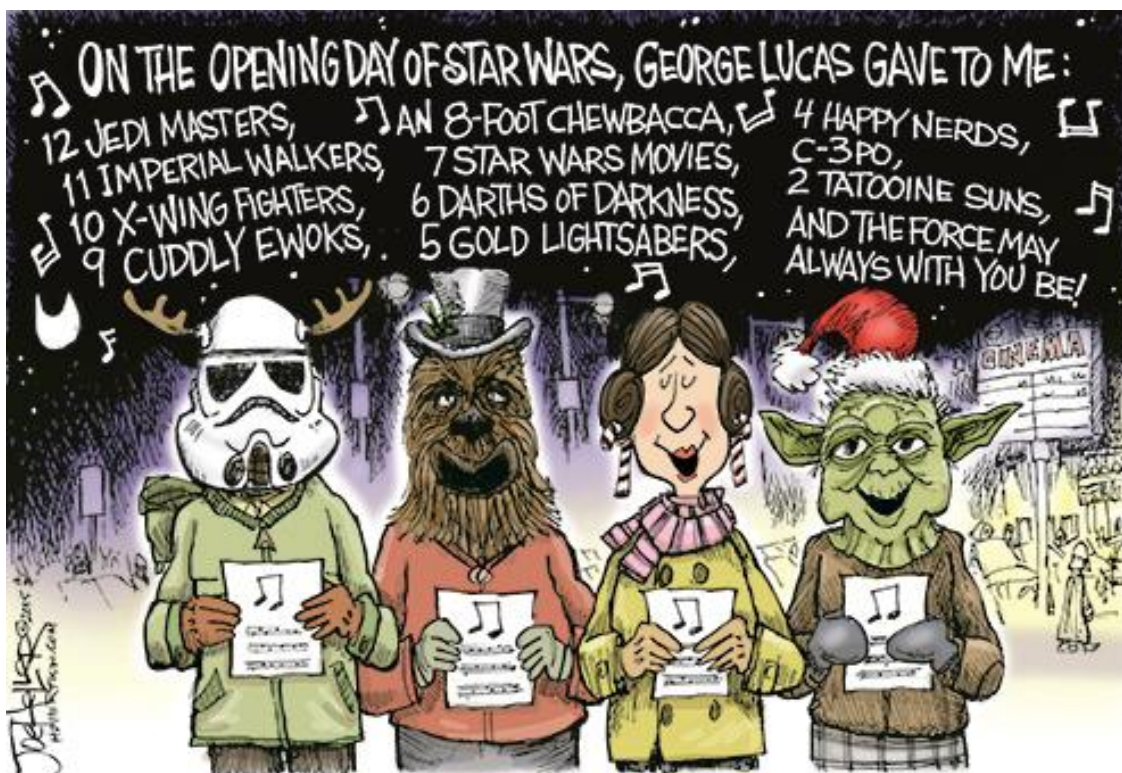
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## Self-Reflection: Political Cartoon



Watch this 99 second clip to help those who may not know Star Wars:

<https://www.youtube.com/watch?v=BAxuyImnVU0>

What do you think of Star Wars?

Do you understand the "hype" surrounding it?

How can some people "geek out" about it?

## HiSET Question

**High School Equivalency Test Preparation, Science.** Paxen, 2014.

Page 181, question 1

### **Pluto Is Demoted to “Dwarf Planet”**

“After years of wrangling and a week of bitter debate, astronomers voted on a sweeping reclassification of the solar system. In what many of them described as a triumph of science over sentiment, Pluto was demoted to the status of “dwarf planet”....

“It has long been clear that Pluto...stood apart from the previously discovered planets. Not only was it much smaller...but its elongated orbit tilted with respect to the other planets and it goes inside the orbit of Neptune part of its 248-year journey around the Sun....

“Two years ago, the International Astronomical Union appointed a working group of astronomers to come up with a definition that would resolve the tension....”

From *The New York Times*, August 24, 2006

**Which characteristic of this article helps you evaluate it as a valid source of information?**

- A** It reports on an important event.
- B** It mentions the International Astronomical Union (IAU)
- C** It is about a subject often discussed in the news.
- D** It is printed in a respected newspaper.



## HiSET Question: Answer Key

**High School Equivalency Test Preparation, Science.** Paxen, 2014.

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D is the correct answer since respected newspapers are generally considered to be reliable sources of information.

### Math Challenge

**Problem modeled after High School Equivalency Test Preparation Mathematics.** Paxen, 2014. Page 120, question 5

The flight distance between Coruscant and Kashyyk is approximately 850 miles. A Jedi starfighter leaves Coruscant at 11:30am. The average speed of the starfighter is 500mph. The time in Kashyyk is one hour ahead of the time on Coruscant. What time will it be in Kashyyk when the starfighter lands?

- A 11:12am
- B 12:12pm
- C 1:07pm
- D 1:42pm
- E Not enough information is given

\*\*\*\*\*

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- B 12:12pm
- C 1:07pm
- D 1:42pm
- E Not enough information is given

B is the correct answer because  $d=rt$  for  $t$  when  $d=850$  and  $r=500$  to find that  $t=1.7$  hours which equals 1 hour and 42 minutes. The Jedi starfighter will land at Kashyyk at  $(11:30+1:42)-1$  hour (time change)=12:12pm.

## Lesson Plan Format for: Tattoos

<p><b>College and Career Readiness Standard Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 1 (Reading): Read closely to determine what the text says explicitly to make logical inferences from it.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 1 (Writing): Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about tattoos and how it might impact a future job.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Poll the students to see who has tattoos. Ask why they do? Ask those who do not, why they do not.</li> <li>•</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• Discussion questions, copy provided</li> <li>• Essay: Tattoos in the Workforce, Are They Okay?, copy provided</li> <li>• Find the Error: Patriots Fan Does Not Regret Tattoo, copy provided</li> <li>• HiSET question</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• Use the handout, provided, to activate prior knowledge</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Inferencing checklist, copy provided</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question, copy provided</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• Political cartoon</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Watch this You Tube video on being a tattoo artist. <a href="https://www.youtube.com/watch?v=LH4BzkqDA_Y">https://www.youtube.com/watch?v=LH4BzkqDA_Y</a></li> <li>• Would you like this as a job?</li> </ul>
<p><b>Math Challenge</b></p>	<ul style="list-style-type: none"> <li>• See handout, copy provided</li> </ul>

## Tattoos



Image taken from:

[https://www.google.com/search?q=cost+of+tattoo+removal&biw=1440&bih=767&site=webhp&source=lnms&tbm=isch&sa=X&ved=0ahUKFwjs6cWmjffKAhUGPj4KHU54C08Q\\_AUICCGD&dpr=1#tbm=isch&q=tattoos&imgsrc=eAq2dl1txiFUPM%3A](https://www.google.com/search?q=cost+of+tattoo+removal&biw=1440&bih=767&site=webhp&source=lnms&tbm=isch&sa=X&ved=0ahUKFwjs6cWmjffKAhUGPj4KHU54C08Q_AUICCGD&dpr=1#tbm=isch&q=tattoos&imgsrc=eAq2dl1txiFUPM%3A)

1. Do you have a tattoo? If yes, describe it. If no, why not?
2. Why do people get tattoos?
3. Watch this short video on a Patriots fan who got a tattoo.  
[https://www.youtube.com/watch?v=IU\\_6eMfh1y8](https://www.youtube.com/watch?v=IU_6eMfh1y8)

What is your reaction to this?

Would you ever get tattoo celebrating a team victory before it even took place? Why or why not?

4. The cost of a tattoo starts at \$100 to \$300 per hour and depending on the size, it may augment to thousands of dollars. If one wants a custom tattoo, the price per hour can start from \$50 to \$300. Do you think this price is reasonable? Why or why not?
  
5. Tattoos can be removed using several different methods: laser removal, excision or dermabrasion, and the cost varies for each technique. Laser tattoo removal, which is the most common method, and usually the best, ranges from \$200 to \$500 per session. Because it can take from five to twenty sessions to remove a tattoo, the total cost could reach \$10,000. If a person knew how much it would cost to have a tattoo removed, do you think this would be a deterrent?
  
6. The career requirements for a tattoo artist are listed in the box below. Is this a career you would like to have? Why or why not?

<b>Education Required</b>	High school diploma or proof of GED completion is usually required
<b>Experience</b>	Apprenticeship, commonly three years in length, might be required
<b>Licensure</b>	Required in most states
<b>Key Skills</b>	Creativity, manual dexterity and artistic ability
<b>Salary (2015)</b>	\$30,415 per year (National median salary for tattoo artists)

## Essay

### Tattoos & Piercings in the Workplace – Is It Okay?

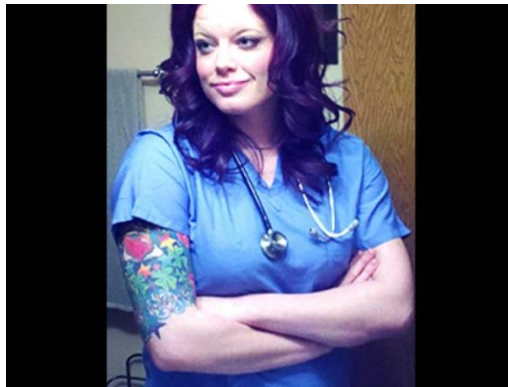


Image taken from: <https://www.youtube.com/watch?v=50TBKaQKFvo>

Obligatory for rock stars, body art (tattoos and piercings) has infiltrated genteel society, increasingly visible on bodies of all ages and walks of life. According to a study from the Pew Research Center, almost 4 of 10 people between the ages of 18 and 40 proudly sport one or more “tats,” a 400% increase from prior generations. One in 20 people have multiple body piercings (excluding ear lobes) from their head to the more intimate parts of their bodies. The explosion of skin decorations, punctures, and untamed hair colors and styles presents business owners and HR departments across the country with a challenge: “Can we trust these people if we hire them?”

Showing a tattoo or a body piercing makes a statement, intentional or not, about the wearer. Public opinion polls consistently show that the general public has a negative image of people with multiple, visible tattoos or extreme body piercings. It is one thing to have a dainty mushroom tattooed on the edge of your shoulder blade, and quite another to have a flaming skull glaring from your forearm, even though the skull is your college fraternity’s symbol.

If you have a visible tattoo or an unusual piercing, you become a walking stereotype, begging strangers to judge you. While in some cases, the opinion you get is the one you seek, it is overwhelmingly negative in most business environments.

Despite the opinions of pop psychologists and business consulting gurus, rebels and freethinkers do not fare well in most business environments. A business owner or a company manager wants to work with people who can take directions and follow rules, who fit in and don’t make waves. Body art, however, screams, “I am different!” In competitive markets where image and customer service are paramount, there is little reason to hire or promote a person who goes his or her own way or may turn into a problem once hired.

According to a study by CareerBuilder, 60% of employers will not hire candidates with tattoos or body piercings. The same study indicated that tattoos were the third most



## Find the Error

### Patriots Fan Doesn't Regret Super Bowl 50 Tattoo



Patriots' fans have come to believe that any season not ending in a Super bowl appearance is nothing short of an off-script botch job by the National Football league.

Somehow -- bravely -- they wage on with their lives, especially Burke O'Connell.

After all, it was O'Connell who went out and had his freind, a tattoo artist by name of "Milkatz," litter his calf with art trumpeting new England as the Super Bowl 50 champions.

Not accurate, but permanant.

"I don't regret it at all," O'Connell told WCVB-TV, per the Boston Globe, after the Patriots were dropped by the broncos in last Sunday's AFC Championship Game.

"Honestly, I just had a bad feeling right in the beginning, right when they started losing and I was like, 'Oh, Milk, this better work out, Dude,'" O'Connell said.

In a rare trail for victory-drenched Patriots fans, it didn't work out, leaving O'Connell to wax philosophically about the ink still drying on his lower leg.

"They're champs anyway. We got for rings," said O'Connell. "We're the best anyway regardless if we win or lose."

Taken from: <http://www.nfl.com/news/story/0ap3000000628904/article/patriots-fan-doesnt-regret-super-bowl-50-tattoo>



## Find the Error

### Answer Key

#### Patriots fan doesn't regret Super Bowl 50 tattoo



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"They're champs anyway. We got four rings," said O'Connell. "We're the best anyway regardless if we win or lose."

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## Body Art: Tattoos

Taken from High School Equivalency Test Preparation, Writing, Student Edition. Paxen. Page 52

### (A)

(1) Archaeological evidence suggests that tattoos have existed since prehistoric times. (2) Cultures throughout history have used tattoos and other types of body markings for a variety of purposes. (3) Body markings were used to indicate religious beliefs. (4) To show that a person belonged to a particular group or tribe. (5) Over time, tattoo art developed among several different cultures. (6) For example, the use of color in tattoo design first appeared in Japan. (7) Sailors returning from other areas of the world eventually brought tattoos to Europe.

### (B)

(8) Today, tattoos have become increasingly common. (9) According to a 2014 poll, 20 percent of Americans say that they have a tattoo. (10) People choose tattoos in a wide variety of sizes, colors, and themes. (11) A person might get a tattoo to commemorate a special event, pay tribute to a loved one, or show allegiance to a favorite band or sports team. (12) Although tattoo artists may design tattoos for their clients. (13) Many artists will also give tattoos based on designs of a client's own creation.

### (C)

(14) Tattoos are produced by a needle that makes tiny punctures in the skin. (15) A machine connected to this needle then injects dye into the punctures. (16) Because the tattooing process breaks the skin. (17) It is important to make sure that tattoo artists follow all required safety and sanitation measures.

### (D)

(18) Perhaps the greatest risk associated with tattoos is their permanence. (19) When a person's image or beliefs change, a particular tattoo may no longer seem appropriate. (20) A number of tattoo removal procedures now exist. (21) However, these methods cannot always remove a tattoo completely.

8. Sentences 3 and 4: **Body markings were used to indicate religious beliefs. To show that a person belonged to a particular group or tribe.**

**Which is the best way to write the underlined portion of these sentences? If the original is the best way, choose option (A).**

- A beliefs. To show
- B beliefs, to show
- C beliefs but to show
- D beliefs or to show

9. Sentences 12 and 13: **Although tattoo artists may design tattoos for their clients. Many artists will also give tattoos based on designs of a client's own creations.**

**Which is the best way to write the underlined portion of these sentences? If the original is the best way, choose option (A).**

- A clients. Many artists
- B clients and many artists
- C clients; many artists
- D clients, many artists

10. Sentences 16 and 17. **Because the tattooing process breaks the skin. It is important to make sure that tattoo artists follow all required safety and sanitation measures.**

**Which is the best way to write the underlined portion of these sentences? If the original is the best way, choose option (A).**

- A skin. It is
- B skin, or it is
- C skin, it is
- D skin; however, it is

## Answer Key

8. Sentences 3 and 4: **Body markings were used to indicate religious beliefs. To show that a person belonged to a particular group or tribe.**

**Which is the best way to write the underlined portion of these sentences? If the original is the best way, choose option (A).**

- A beliefs. To show
- B beliefs, to show
- C beliefs but to show
- D **beliefs or to show**

D is the correct choice since sentence 3 is a complete thought, but sentence 4 is a fragment. Since both sentences describe what body markings were used for, they should be combined. The connecting word “or” should be used because body markings could mean this or that: *Body markings were used to indicate religious beliefs or to show that a person belonged to a particular group or tribe.*

9. Sentences 12 and 13: **Although tattoo artists may design tattoos for their clients. Many artists will also give tattoos based on designs of a client’s own creations.**

**Which is the best way to write the underlined portion of these sentences? If the original is the best way, choose option (A).**

- A clients. Many artists
- B clients and many artists
- C clients; many artists
- D **clients, many artists**

D is the correct choice since sentence 12 is a fragment, so the best way to write the underlined text requires that the two sentences be combined to form one complete sentence. To combine these sentences and correct the fragment, add a comma between “clients” and “many”. You do not need a connecting word for the sentence to make sense: *Although tattoo artists may design tattoos for their **clients, many artists** will also give tattoos based on designs of a client’s own creation.*

10. Sentences 16 and 17. **Because the tattooing process breaks the skin. It is important to make sure that tattoo artists follow all required safety and sanitation measures.**

**Which is the best way to write the underlined portion of these sentences? If the original is the best way, choose option (A).**

- A skin. It is
- B skin, or it is
- C skin, it is
- D skin; however, it is

C is the correct choice since sentence 16 is a fragment because it does not fulfill the cause-and-effect relationship introduced by the word "Because". A complete sentence would explain that because of A, B is important. To correct this fragment, combine sentence 16 with sentence 17 by inserting a comma. No connecting word is needed: *Because the tattooing process breaks the skin, it is important to make sure that tattoo artists follow all required safety and sanitation measures.*

## Self-Reflection



Taken from: <http://lo20305.blogspot.com/>

What does this political cartoon mean?

How do you relate to it?

Why was it drawn?

What does it have to do with tattoos?

## Math Challenge

Taken from **High School Equivalency Test Preparation: Mathematics, Student Edition**

Paxen, 2014

Page 60, question 18

**Alice typed her income from being a tattoo artist into tax preparation software. If her income was fifty-six thousand and, two hundred, twenty-eight dollars, what digits did she type?**

- A** 5, 6, 2, 2, 0, 8
- B** 5, 0, 6, 2, 2, 8
- C** 5, 6, 2, 2, 8
- D** 5, 6, 2, 8

\*\*\*\*\*

## Math Challenge Answer Key

Taken from **High School Equivalency Test Preparation: Mathematics, Student Edition**

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Page 60, question 18

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- A** 5, 6, 2, 2, 0, 8
- B** 5, 0, 6, 2, 2, 8
- C** 5, 6, 2, 2, 8
- D** 5, 6, 2, 8

**Letter D is correct since fifty-six thousand is written as 56,000 and two hundred twenty-eight is written as 228, so the numbers in place value would be 56, 228.**

## Lesson Plan Format for: Zombie Apocalypse

<p><b>College and Career Readiness Standard</b> <b>Anchor Standard only</b></p>	<ul style="list-style-type: none"> <li>• CCR Anchor 2 (Reading): Determine central ideas or themes of a text and analyze their development; summarize the key details and ideas.</li> <li>• CCR Anchor 1 (Speaking and Listening): Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.</li> <li>• CCR Anchor 5 (Writing): Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</li> <li>• Math Standards, MP.1: Make sense of problems and persevere in solving them.</li> </ul>
<p><b>Purpose of instruction</b></p>	<ul style="list-style-type: none"> <li>• To have students think about emergency preparedness using an entertaining topic.</li> </ul>
<p><b>Activating Prior Knowledge</b></p>	<ul style="list-style-type: none"> <li>• Watch <b><u>Thriller:</u></b> <a href="https://www.youtube.com/watch?v=sOnqjJTMaA">https://www.youtube.com/watch?v=sOnqjJTMaA</a></li> <li>• Ask "why"</li> <li>• Make connections from <b><u>Thriller</u></b> to zombies to actual emergency preparedness</li> </ul>
<p><b>Developing Critical Thinking Skills</b></p>	<ul style="list-style-type: none"> <li>• Use of Bloom's Taxonomy key vocabulary within lesson</li> </ul>
<p><b>Materials needed</b></p>	<ul style="list-style-type: none"> <li>• What Do You Know about Zombies?, copy provided</li> <li>• What Do You Know about Zombies?, answer key, copy provided</li> <li>• With a Blind Eye, short story, copy provided</li> <li>• The Cellar, short story, copy provided</li> <li>• Memo about emergency preparedness</li> <li>• HiSET question</li> </ul>
<p><b>Introducing the topic</b></p>	<ul style="list-style-type: none"> <li>• What will the connection be between an engaging lesson like zombie awareness and real life emergency preparedness</li> <li>• Watch Emergency Preparedness video: <a href="https://www.youtube.com/watch?v=7CTj5Kzk7eg">https://www.youtube.com/watch?v=7CTj5Kzk7eg</a></li> <li>• Do affinity mapping to set up the readings</li> </ul>
<p><b>Modeling of skills</b></p>	<ul style="list-style-type: none"> <li>• Embedded within text</li> </ul>
<p><b>Practicing of skills</b></p>	<ul style="list-style-type: none"> <li>• Use of modeling</li> <li>• Use "Stop and Draw" to complete the lesson</li> </ul>
<p><b>Demonstration of student learning</b></p>	<ul style="list-style-type: none"> <li>• HiSET question</li> </ul>
<p><b>Self-reflection</b></p>	<ul style="list-style-type: none"> <li>• One word splash</li> </ul>
<p><b>Student engagement</b></p>	<ul style="list-style-type: none"> <li>• Observation</li> </ul>
<p><b>Application of learning to the real world</b></p>	<ul style="list-style-type: none"> <li>• Write a memo to the town of Salem indicating the steps necessary to take in an emergency of their own choosing</li> </ul>



## Did You Know that May is Zombie Awareness month? Who knew?

### 1. What is the definition of a zombie?

reanimated / creatures, // mindless, / are / depicted / flesh. / typically / undead / human / hunger / with / Zombies / for / a / corpses / as / human

Haitian / by / body / magic. / The / term / zombi, / animated / is // a / dead / where / a / French: / zombie / comes / folklore / zombi) / (Haitian / Creole: / from / Haitian

virus. / as / do / depictions / such / necessarily // other / involve / Modern / but / a / magic / zombies / not / invoke / methods / of

### 2. What is the definition of a zombie apocalypse?

"zombie / of / in / modern / popular / a / civilized / The / staple / by / apocalypse" / the / low / zombie / became / is / which / world / global / concept, / infestation, / a / art. / brought

### 3. If there were to be a zombie apocalypse, you would need to pack the following to survive. First, make an estimate of how much all these items would cost. Then, you have a budget of \$200, prioritize your list of items.

- Sleeping bag. You will have to sleep sooner or later.
- Ear plugs. To drown out the moaning of the undead.
- Red glow sticks. Good light source.
- Folding shovel. A good close quarters weapon... also good for digging latrines.
- Local map. Preferably a state or provincial map with roads/back roads and bodies of water.
- Compass. To work with your map and help you navigate.

- Self powered flashlight and radio. You need to see and keep up with current events.
- Rope. You'll need a lot, say a few hundred feet. And make sure it's of good quality.
- 8' x 10' tarp. Makes a good, quick tent.
- First Aid Kit. Make sure it's not a cheap one, and put it in a waterproof bag- that gauze won't do any good wet.
- 12 big thick garbage bags. Good for everything from waterproofing your pack to making a poncho, to making a shower.
- 2 Rolls Paper towels. Good for toilet paper and as use for tissues.
- 2 or 3 sets of spare clothing. Obvious reasons...
- Dehydrated/Nonperishable food.
- 2 Liters of Clean Drinking water and a means of getting more. Meaning either have a filter kit, or purification tablets or a stove to boil water.
- Deck of Cards and a novel. You will get bored.
- 2 pocket knives. The uses are endless.
- Multi-tool. They can do anything from opening cans to cutting wire.
- Credit Card. Who knows when you'll need plastic...and it can jimmy locks.
- 4 Burlap sacks. If you'd like to make a quick foxhole/barricade.
- Waterproof matches/ flint and steel. You'll need fire.
- Gun and ammunition
- Hatchet or machete. Both make great close quarter weapons and both are excellent survival tools.
- Good comfy backpack. You'll need a lot of storage for you gear.

Taken from: <http://www.instructables.com/id/How-to-Build-the-Perfect-Zombie-Survival-Kit/?ALLSTEPS>

**4. If there were to be a zombie apocalypse, you would need to wear the following:**

- Under Armor. It's light and will either keep you cool or keep you warm.
- Motocross/Paintball jersey. They are both a good long sleeve top that can breathe, or have room to add layers underneath (depends on your climate)
- Soft elbow and knee pads. They don't hamper mobility and keep you comfy. Plus TRY biting through them.
- A solid pair of cargos. Light and have lots of storage space.
- A good headband. To keep the sweat out of your eyes.
- Waterproof hiking boots (broken in). You'll be on your feet a lot.
- Set of goggles that won't fog. Either snowboard, paintball or motocross will do.
- Bandana. to cover your nose and mouth. Things will get messy.
- Good set of gloves. Again motocross or paintball will do.

And keep in mind if it's cold out you'll need to dress/pack accordingly. Just keep in mind to cover up.

Taken from: <http://www.instructables.com/id/How-to-Build-the-Perfect-Zombie-Survival-Kit/?ALLSTEPS>

**Estimate the cost of these items.**

**You have a budget of \$50. Prioritize what you would buy.**

## Did You Know that May is Zombie Awareness month? Who knew? Answer Key

### 1. What is the definition of a zombie?

Zombies are undead creatures, typically depicted as mindless, reanimated human corpses with a hunger for human flesh.

The term comes from [Haitian folklore](#) ([Haitian French](#): *zombi*, [Haitian Creole](#): *zonbi*) where a [zombie](#) is a dead body animated by magic.

Modern depictions of zombies do not necessarily involve magic but invoke other methods such as a virus.

### 2. What is the definition of a zombie apocalypse?

The "zombie apocalypse" concept, in which the civilized world is brought low by a global zombie infestation, became a staple of modern popular art.

### 3. If there were to be a zombie apocalypse, you would need to pack the following to survive. First, make an estimate of how much all these items would cost. Then, you have a budget of \$200, prioritize your list of items.

- Sleeping bag. You will have to sleep sooner or later.
- Ear plugs. To drown out the moaning of the undead.
- Red glow sticks. Good light source.
- Folding shovel. A good close quarters weapon... also good for digging latrines.
- Local map. Preferably a state or provincial map with roads/back roads and bodies of water.
- Compass. To work with your map and help you navigate.
- Self powered flashlight and radio. You need to see and keep up with current events.
- Rope. You'll need a lot, say a few hundred feet. And make sure it's of good quality.

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**4. If there were to be a zombie apocalypse, you would you need to wear the following:**

**First, make an estimate of how much all these items would cost. Then, you have a budget of \$50, prioritize your list of items.**

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- Motocross/Paintball jersey. They are both a good long sleeve top that can breathe, or have room to add layers underneath (depends on your climate)
- Soft elbow and knee pads. They don't hamper mobility and keep you comfy. Plus TRY biting through them.
- A solid pair of cargos. Light and have lots of storage space.
- A good headband. To keep the sweat out of your eyes.
- Waterproof hiking boots (broken in). You'll be on your feet a lot.
- Set of goggles that won't fog. Either snowboard, paintball or motocross will do.
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And keep in mind if it's cold out you'll need to dress/pack accordingly. Just keep in mind to cover up.

Estimate the cost of these items.

Taken from: <http://www.instructables.com/id/How-to-Build-the-Perfect-Zombie-Survival-Kit/?ALLSTEPS>

They huddled together for warmth. They were cold, so very tired, and hungry. What seemed like a good idea at the time, became far more dangerous than any of them anticipated. Now they were trapped in the storage room of the "Stop and Go", a local convenience store. There were three of them, Mary Rose 17, Katy 8, and Brent 18. Behind the locked steel door of the storage room were at least six of them, beating non-stop and moaning. Sometimes if you were really, really quiet they would forget about you and go away. There were none of those things in here with them, they'd checked earlier so they were safe for now.

Brent took the flash light from his pocket and looked around to see what the room consisted of. He was happy to see that the room contained a small corner bathroom. The rest was a combination storage room and employee break room. The break room area contained a small table with a microwave , 2 chairs, a refrigerator and a small sink. Unfortunately, the electric went out days ago and the water stopped running shortly after. Shinning the light into another corner, Brent found an old drop cloth probably left there from an earlier paint job. Shaking it out, he brought it over to the girls and draped it over their shoulders hoping it would warm them a bit.

Walking over to the other side of the room Brent found several pallets with boxes on them. Some of the boxes contained paper goods like napkins, paper plates, popcorn bags with their logo, disposable diapers and Styrofoam glasses with their logo for the soda fountain.

In a far corner Brent found two pallets containing bottled water, different types of soda, juice and beer. He also found a pallet of boxes with their contents labeled, chips, crackers, Vienna sausages, beef jerky, candy bars, pork & beans and lots of other goodies. Grabbing an assortment of food items and three bottles of water, he made his way back to the girls. Quietly they ate their meal and fell asleep despite the moans and pounding made by those things on the other side of the door.

It was morning and Mary Rose was the first to rise. It was quiet, so quiet you could hear the sounds of Katy and Brent's gentle snores. She looked at her brother and sister and felt both love and a deep sense of sadness. The world they knew was gone forever. Now they lived in Hell. It was as if God turned a blind eye on the human race. No one knew where the pandemic came from, or at least that is what the news broadcasts stated. So many theories but no one really knew what happened and probably never would. The first news reports

called it sporadic rioting in many of the large U.S. cities. Eventually the reports became more horrific, people attacking, dismembering and cannibalizing.

They lost their parents the first month when a herd broke down their front door. She would never forget the sound of her parents screaming as the crowd of dead things ripped them apart. They ran, as they promised their parents they would and were still running.

Now nowhere was safe, the dead were everywhere. How easy it would be to just give up but that wasn't an option. Katy was only 8 and Mary Rose promised her parents that she and Brent would keep Katy safe. As she watched Katy sleeping, she ran her fingers through Katy's baby fine red hair. The only red head in the family, the rest of them had brown hair. Everyone always teased Katy about her red hair and the spray of freckles that lightly graced her checks and nose.

Finally the other two woke up and they ate a breakfast of fruit punch and Fig Newtons. They all talked about their current situation and realized it was a blessing in disguise. They were safe for now, had shelter, food and water. Even the old drop cloth was something to be thankful for. Maybe they would make it after all.

Taken from: <http://fiction.homepageofthedeath.com/forum.pl?readfiction=1163H&ai=pl3ePi5tYkeekceed>

**What were the classic examples of a zombie apocalypse in this short story?  
(Use the 4 A's of Text Protocol)**



The Cellar  
(© Joshua Wohlers)

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There are only three of us down here. We could be the last for all I know, haven't seen anyone since the last group of looters was chased off by a gang of those things. There is hardly any point to leaving anymore, we've gone through every house in the subdivision already so we just sit and wait. We've been down here for a month now, we don't even know what we are waiting for. At first we were waiting for rescue but after we saw a group of those things wearing National Guard uniforms stumble past we knew it wasn't coming. So now we sit and watch the world through our little basement windows waiting for anything really. We don't even speak to each other anymore, at least like we used to, no more small talk, no more fantasizing about what we were going to do. We used to do that; we even made a plan to get out...there was five of us then. No more plans, no more grand ideas. For now, we have plenty of supplies so we sit and we wait. Sometimes I think we are just waiting to die, a nice quiet death down here in the cold dark cellar seems much better than the loud violent death that awaits us outside. No one says it but it's there in their eyes, their will to go on is only strong enough to keep them from killing themselves. Who knows how long that will last...I wonder who the first will be? Not me...not today anyway, though how many more times can I watch what used to be my wife shuffle past the cracks in the boarded up windows? One more time? A hundred? If I'm the first to do it I would be polite at least and do it nice and quiet, no guns. Wouldn't want to put the others at risk, they have to make their own choice after all. Not today though. It's getting dark out; time to make sure everything is secure and get some sleep.

Another morning comes, we eat in silence as always. We gather our trash and the buckets we relieve ourselves in and creep to the top of the stairs. Quietly removing the crossbar on the door we enter the main portion of the house...my house. We move quickly to the open back door and toss out our trash and dump our waste and then scurry back into our safe little hole. We stand on the steps barely daring to breath as we strain to listen as hard as we can for the slightest tremor of movement in the house above. For ten minutes we stand there on the steps...our morning ritual, our moment of silence for the dead world above us. I don't think anyone even prays anymore while we wait...they used to, I could see their lips twitching involuntarily as they silently prayed for the silence to be unbroken. Now we just wait, always waiting, no more praying, no more hoping: ours is a religion of silence, we show piety through strict adherence to the routine.

The routine, oh praise be to the routine. It has kept us safe when God abandoned us here. It has kept us secure as all that Man built came apart. We

know that like all things in this waking nightmare it will end one day. Maybe the food will run out and we will be forced to try and leave again. No, not that, my guess is that the routine will simply fail one day. We will look up, there will be shock and fear, followed by running and screaming. Followed by the dying, but always the screaming. I hope I don't scream when it's finally my time to go. It always attaches guilt to whoever hears it even if we had nothing to feel guilty about. The first one is always the lucky one. They just have the fear and shock on their face and then it's over, no more running, no more fighting. I wonder why we fight so hard when we are in so much danger? Not today, I'm too tired to fight today.

Taken from and modified: <http://fiction.homepageofthedead.com/forum.pl?readfiction=1160H&ai=pl3ePi5tYkeekceed>

**What were the classic examples of a zombie apocalypse in this short story?**

**(Use the 4 A's of Text Protocol)**

**Write a memo to the town of Salem warning them of an emergency (your choice) and what precautions and preparation needs to be taken to ensure safety of the residents of Salem.**

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Edited Version

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**Memo: Emergency Notification System**

**To:** All Students

**From:** Registrar's Office

**Subject:** Emergency Notification System

**(A)**

(1) As part of a statewide effort to inform different audiences about major, safety-related emergency news, *warner* college plans to create a new Emergency Notification System.

(2) Beginning next semester, students and staff members will receive alerts from the new system regarding emergencies on campus.

(3) Department heads will be notified if staff member chose not to receive the alerts.

(4) If members of the student bodies prefer to receive alerts as text messages, they should e-mail the registrar's office.

**(B)**

(5) The campus police are conducting tests of our new Emergency Notification System over the next several weeks. (6) Communicating emergency information is very import to us and we thank you for your support in this endeavor.

6. Sentence 1: As part of a statewide effort to inform different audiences about major, safety-related emergency news, Warner College plans to create a new Emergency Notification System.

Which correction should be made to sentence 1?

- A change audiences to audience
- B change warner college to Warner College
- C change effort to efforts
- D change news to newes

7. Sentence 3: Department heads will be notified if staff member choose not to receive the alerts.

Which correction should be made to sentence 3?

- A change member to members
- B change Department to Departments
- C change heads to head
- D change alerts to alertes

8. Sentence 4: If members of the student bodies prefer to receive alerts as text messages, they should e-mail the registrar's office.

Which correction should be made to sentence 4?

- A change alerts to alertes
- B change messages to message
- C change text to texts
- D change student bodies to student body

9. Sentence 5: The campus police are conducting tests of our new Emergency Notification System over the next several weeks.

Which is the best way to write the underlined portion of this sentence? If the original is the best way, choose option A.

- A The campus police are conducting tests
- B The Campus Police are conducting tests
- C The campuses police are conducting tests
- D The campus Police are conducting tests

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- A change audiences to audience
- B change warner college to Warner College
- C change effort to efforts
- D change news to newes

B is correct since “warner college” is the name of a specific place and should be capitalized.

7. Sentence 3: Department heads will be notified if staff member choose not to receive the alerts.

Which correction should be made to sentence 3?

- A change member to members
- B change Department to Departments
- C change heads to head
- D change alerts to alertes

A is correct , because in sentence 3, “member” should be changed to “members”.



8. **Sentence 4:** If members of the student bodies prefer to receive alerts as text messages, they should e-mail the registrar’s office.

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- A change alerts to alertes
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- B The Campus Police are conducting tests
- C The campuses police are conducting tests
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A is the correct answer since sentence 5 does not contain any proper nouns and correctly uses the collective noun, “campus police”.

**Notice for Emergency Awareness**

**(A)**

**(1) Having a plan for what to do in an emergency is important to ensure the safety of your family. (2) An emergency may include a fire. (3) An emergency may include and earthquake. (4) An emergency may include a hurricane or tornado. (5) To make a family safety plan, follow these tips:**

**(B)**

**1. (6) Establish an escape route from each room of your home. (7) Every member of the family should know how to get out of the home without assistance.**

**(C)**

**2. (8) Select a meeting locations in case family members become separated. (9) One location should be in your neighborhood. (10) One location should be outside your neighborhood.**

**(D)**

**3. (11) Choose a person outside the city to contact in the event of an emergency. (12) Make sure that every family member has the telephone number and e-mail address of this person.**

**(E)**

**4. (13) Prepare an emergency card for each family member to carry with him or her. (14) The card should have information on emergency contacts, medical condition and medication, and the names of family members.**

2. Sentences 2, 3, and 4: **An emergency may include a fire. An emergency may include an earthquake. An emergency may include a hurricane or tornado.**

**Which of the following is the most effective revision of sentences 2, 3, and 4?**

- A An emergency may include a fire, an earthquake, a hurricane, or a tornado.
  - B Fires and earthquakes are emergencies. Hurricanes and tornados are emergencies.
  - C In the event of an emergency, such as a hurricane or tornado, check for fires and earthquakes.
  - D An emergency may include a fire earthquake hurricane or tornado.
3. Sentences 9 and 10: **One location should be in your neighborhood. One location should be outside your neighborhood.**

**Which of the following is the most effective revision of sentences 9 and 10?**

- A Both locations should be inside or outside your neighborhood.
- B In your neighborhood, you should have one location. Outside your neighborhood, you should have another location.
- C One location should be in your neighborhood, and the other should be outside your neighborhood.
- D One location should be in your neighborhood but outside your neighborhood.

**Notice for Emergency Awareness**

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- B** Fires and earthquakes are emergencies. Hurricanes and tornados are emergencies.
- C** In the event of an emergency, such as a hurricane or tornado, check for fires and earthquakes.
- D** An emergency may include a fire earthquake hurricane or tornado.

Answer A is correct because sentences 2, 3, and 4 are choppy sentences and can be combined to create longer, more polished sentences.

3. Sentences 9 and 10: **One location should be in your neighborhood. One location should be outside your neighborhood.**

**Which of the following is the most effective revision of sentences 9 and 10?**

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- B** In your neighborhood, you should have one location. Outside your neighborhood, you should have another location.
- C** One location should be in your neighborhood, and the other should be outside your neighborhood.
- D** One location should be in your neighborhood but outside your neighborhood.

Answer C is correct because they can be combined by adding the word "and". Combing these two sentences makes the paragraph sound less repetitive.

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## 3-2-1 strategy



Image taken from: <http://www.politicususa.com/2014/04/12/2014-death-film-film.html>

This is a cooperative reading strategy. In utilizing this strategy, the adult learner gets to interact with the text in three distinct ways.

1-the learners summarize the important points from the reading.

2-the learners share the most interesting information they gained from the assigned reading.

3-the learners ask questions to seek clarification around the text.

You might think, this is too simple to work, but it does. The 3-2-1 strategy sets up the student to truly engage with the text. In 3-2-1 strategy, the teacher is asking the students to do a lot of work.

3-things the learner found out. The learners have to summarize and cite 3 different details that they learned from the reading.

2-things they found interesting. The learners summarize and cite two different details that they found interesting from the reading.

1-question that they still have. The learners write one question they still have from the reading.

This strategy is simple and straightforward, and customized to the learner's individual needs.

Taken from 101 Learning Strategies Mini Grant, written by Robin Letendre



## A-Z Brainstorming



Image taken from: <http://gamedev.uconn.edu/?cat=3>

A

B

C

D

E

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X

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Z

## Carousel Your Way through a K-W-L



Image taken from: <http://www.palmbeachzoo.org/Wildlife-Carousel-to-be-Closed-for-Maintenance>

In this activity, you are utilizing the K-W-L procedure, but in a differentiated way.

To do this activity, you will need to decide upon a major unit and the topics that you want to cover within that unit.

On large pieces of chart paper, write each of the individual topics that you want to address.

Post each different sheet of paper in different areas of the class.

Divide the learners equally based on the number of chart papers that you have. For example, if you have 4 chart papers, make 4 groups.

Give each group a different colored marker and have them each go to a different chart paper.

Ask each group to appoint a recorder.

After a few minutes at their chart paper, have each group rotate to another chart paper.

Ask the group to review the statements left by the previous group. Have the recorder place a checkmark next to statements that the group knew. At this point, have the recorder mark new comments from the group that is at the current chart.

Tell the groups that they are not looking to disprove statements that are there. All they are to do is check off information that they knew, or add new information to the chart paper.

This process continues until the groups are back to their chart paper that they started with.

Now the group needs to select a reporter.

Once that is done, the reporter has to give the class a brief verbal summary of the information on the chart that the group started at.

After each group reports out, ask the class to think of some question they have about each of the topics.

These additional questions should be recorded on additional chart paper so that the learner can see them and refer back to them during the unit.

After the unit is complete, have the learner return to the chart paper to make comments about the questions and what they have learned.

Taken from: 101 Learning Strategies, Mini Grant by Robin Letendre

## Crystal Ball



Image taken from: [http://www.iwillteachyoutoberich.com/blog/you-actually-have-a-crystal-ball-that-lets-you-look-10-years-in-the-future/?utm\\_referrer=https%3A%2F%2Fwww.google.com%2F](http://www.iwillteachyoutoberich.com/blog/you-actually-have-a-crystal-ball-that-lets-you-look-10-years-in-the-future/?utm_referrer=https%3A%2F%2Fwww.google.com%2F)

Have students read a text. At the end of the text, this strategy is employed to ensure that incorrect assumptions have not taken place. In Crystal Ball, you ask the students, “what happens next?” You can decide with or without student input how you will do one word splash. You can do this strategy as a large group, pairs, small groups, or individual.

## Cup Stacking



Image taken from: <http://imgfave.com/view/2471238>

Cup stacking is also known as speed stacking. In this strategy, you are going to have students speed stack or cup stack, cups that they have created that review material already presented in class.

This strategy works best when material has a correct sequence or hierarchy. Ideas that can be used for cup stacking are: time lines, steps in a process, numerical or alphabetical order, the periodic table of elements, periods in music or history, musical note values, or the sequence of a story. Cup stacking can also be used for categorizing and sorting.

You will need 20 oz., plastic-coated cups, one for each student in class, or more depending upon if students will work in small groups, pairs, or individually.

You will need water-based markers, so that you can reuse the cups.

Have each student write one word on the cup.

Once that is done, have students get ready to stack their cups. You will have to determine the amount of time that students will have to stack their cups.

The object of the cup stacking is to have the stacks in the correct order, as well as the highest of the stacks. Continue to do cup stacking for a set amount of time.

Taken from: 101 Learning Strategies Mini Grant, [Engage All Students Through Differentiation](#) by Anne Beninghof

Pages 92-93

# Dueling Charts

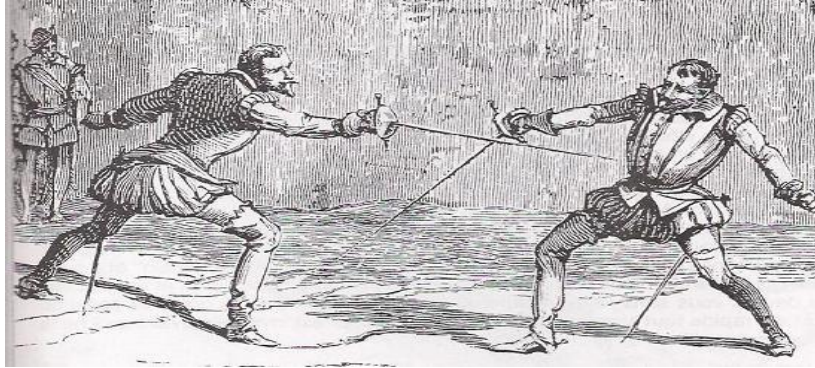


Image taken from: [http://fencing-future.com/cntnt/eng/fehtovanie9/eng\\_history/nemnogo\\_o\\_.html](http://fencing-future.com/cntnt/eng/fehtovanie9/eng_history/nemnogo_o_.html)

This strategy employs teamwork to review material. This strategy is excellent too, since it does not take any planning or prep. All that is needed is chart paper, and if that is not available, a large piece of construction paper.

In this strategy, you will have students break into an even number of only two groups.

Once this is done, the facilitator will then write down one key concept on the opposing chart papers or construction paper.

For example, the word Civil War would be put across the chart paper.

When that is done, the method of this strategy is then like an acrostic poem.

Each member gets to have a turn at the chart paper and each member has to fill out a letter in the word Civil War that they know a fact to.

The letters do not have to be done in order.

The goal of the group is to fill in each of the letters with information that has been learned.

Taken from: 101 Teaching Strategies, mini grant written by Robin Letendre

## Found Poems

A  
volcano.  
A huge rock,  
shooting lava up into  
the air! Everyone runs for  
cover. Lots of thick, black smoke  
pours out of the top, giving you a warning  
before the explosions start. Nothing can stand in its  
way. Sometimes they don't blow up for hundreds of years.  
Still thousands in the world but they don't all work, some are even underwater.

Image taken from: <https://www.youngwriters.co.uk/types-shape-poem>

Found Poems is a great strategy to summarize learning and to look at text closely.

After a text has been read, students need to create a “poem” it does not need to rhyme or have sentence structure, but it DOES need to be a poem constructed of words only found in a text that was read in class.

A suggestion to have this strategy work well is to have students highlight the words in the text that they want to use, and then have them construct sentences with these words.



## Four Squares

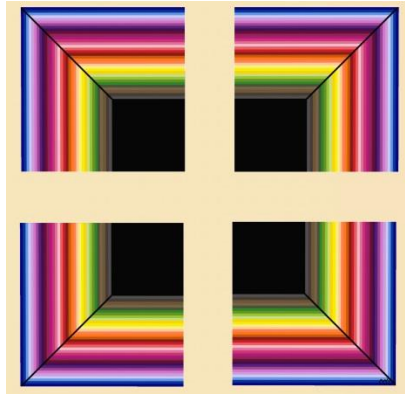


Image taken from: <https://facetious1.wordpress.com/page/4/>

To do Four Squares, have your students fold the paper in half and then half again. (See model below.)

When that is done, have students write in the boxes who, what, when, where in small print in the left and right corners of the boxes.

Have students write a brief example of what is being asked or questioned based on who, what, when, and where.

When that is done, have students exchange papers and see if they can figure out what the four categories are representing.

An example of “who” is: I wear white and I use sharp knives to do my job. A student reading that would infer that the “who” is a chef based on the information that is presented.

Who?	What?
When?	Where?



## I Do, We Do, You Do



Image taken from: <http://blog.vizibl.co/supplier-collaboration-comes-supplier-innovation/>

I do: As the teacher, you will model/perform the lesson, strategy, technique etc.

We do: Have students work on the goal of the class together with teacher assistance.

You do: Have students work on the lesson, strategy, technique etc. on their own.

## One Word Splash



Image taken from: <http://www.pycomall.com/Lion-Splash.html>

Have students read a text.

You can determine if you will do the one word splash after each paragraph, passage, short story etc.

In one word splash, students need to summarize what was just read by using one word.

It sounds simple, but it is not. It takes a lot of critical thinking skills to summarize all of the content found in one paragraph or passage.

You can decide with or without student input how you will do one word splash. You can do this strategy as a large group, pairs, small groups, or individual.

## Sentence-by-Sentence Stretcher



Image taken from: <https://www.pinterest.com/chadcorp/yoga/>

This is a fun, hands-on strategy that allows students to see their writing take shape.

In this strategy, you will need post-it notes, but if you do not have access to post-it notes, index cards or cut up recycled paper works fine.

In this strategy, you want students to write one sentence per post-it note, index card, or piece of paper.

Tell students to keep in mind this process while they are writing.

Once the students have finished writing on their post-it notes, index cards, or paper, have them place their sentences one by one on their desk.

This is a kinesthetic and tactile experience. It allows the students to see their writing take place, and it allows them ease in moving sentences around and making edits to their writing, without having to rewrite the entire essay.

Once students have placed their post-it notes, index cards or pieces of paper in the order they want, they are now free to write their good copy.

Taken from: 101 Learning Strategies Mini Grant, written by Robin Letendre

## Stop! Draw!



Image taken from: <http://www.thebostoncalendar.com/events/flash-drawing-session--19>

In this strategy, you will be encouraging students to visually depict what they have learned.

Before beginning class, instruct students to divide their paper by folding into either fourths or eighths, depending upon the complexity of the material.

Once that is done, tell the students that they are NOT going to write down notes while they are being presented. Instead, as the lecture is being presented, they will be asked periodically to Stop! Draw! At that point, they will be able to depict what they have learned to date by either utilizing words, graphics, illustrations and so on.

When class is done, this visual representation will provide a chronological order of notes that were taken, and it will have been done in a creative way that did not utilize much writing, but utilized much engagement.

Taken from: 101 Teaching Strategies, Mini Grant, written by Robin Letendre

## Take a Stand



Image taken from: <http://www.talesfrombandcamp.com/2013/03/take-a-stand.html>

Have students read a text.

At the end of the text, this strategy is employed to ensure that students have understood this passage and are now ready to state their opinions about the text.

With this strategy, students are to formulate for themselves if they “agree”, “disagree” or are “unsure of their thinking”.

Once they have decided that for themselves, they are to go to a designated place in the room to discuss with like-minded students why they agree, disagree, or unsure of their thinking.

After some time of discussion, students can move their placement and discuss again their thinking.