



THE GIFTED

TEACHER TOOLBOX

PHASE 2

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YOU CAN

DO IT...

WE CAN

HELP!



<http://teacherpages.hallco.org/webpages/allenfawcett>

CREATIVITY MATTERS!

BLUEPRINT: The most basic definition for creative thinking is the ability to create. We teach students the common framework for the Creative Thinking processes as described by Torrance (1979). The four main principals are Fluency, Flexibility, Originality, and Elaboration.

KIDS AT WORK: (How does this work and look in our classroom?)

- ⇒ We have a display in our classroom with the four parts of creativity with a description of each. We also post exemplary student work underneath of each category.
- ⇒ Our creativity activities for each grade level build each year from kindergarten to 5th Grade.
- ⇒ Brainstorming Rules
- ⇒ Unit Supplements–Creativity Packets–It’s All About the Spinner/Boo To You!/ A to Z Creativity/It’s SNOW Creative.
- ⇒ Clever Categories–Fluency, flexibility, Originality–students are given specific letters/categories to think of as many items in each category as possible.
- ⇒ Choice = Motivation

RESOURCES/TOOLS:

- ⇒ *The OK Book* by: Amy Krouse Rosenthal & Tom Lichtenheld – great for originality/elaboration
- ⇒ *Stick and Stone* by: Beth Ferry & Tom Lichtenheld–friends stick together, students elaborate on what two things go together and why.
- ⇒ *Battle Bunny* by: John Scieszka and Mac Barnett, flexibility, originality, & elaboration–students take a familiar “old” story cover and create a new cover using originality and elaboration.
- ⇒ *What Do You Do With an IDEA?* By: Kobi Yamada & Mae Besom. This book motivates one to develop unique ideas.
- ⇒ *DO NOT OPEN THIS BOOK!* By: Michaela Muntean & Pascal Lemaitre. It’s not easy putting words together to make a book as pig finds out in this story when the words keep blowing off the page. Students could create their own version of this story using a variety of words they categorize into their original groups.
- ⇒ *Thanks for the Feedback* by: Julia Cook and Kelsey DeWeerd–great story about accepting criticism and compliments the right way!
- ⇒ Give each student a paperclip. Fluency–have students brainstorm the uses of a paperclip. Flexibility–what are other uses for that paperclip? Originality/Elaboration–have students create an illustration using the paperclip as the stimulus.

YOU “NAILED IT!” (Student products/performance)

We spend a lot of time at the beginning of the year on fluency, flexibility, originality, and elaboration for each grade level. As they say...practice makes perfect!

Ask the following questions: Did you...

Develop ideas in original and/or surprising ways?

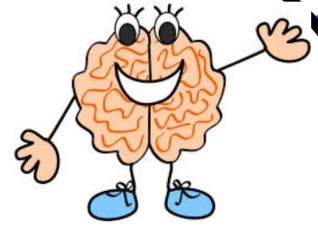
Build upon an idea?

Brainstorm multiple ideas?

BRAINSTORMING RULES



**BREAK ANY RULES
EXCEPT THESE!!!**



ALL IDEAS ARE ACCEPTED

No judgements.

WELCOME WACKY IDEAS

The crazier the idea...the better!

GO FOR QUANTITY, NOT QUALITY

Don't evaluate the ideas.

PIGGYBACKING IS OK!

Build upon other's ideas.

IT'S ALL ABOUT THE SPINNER!

IT'S ALL ABOUT THE SPINNER!!!

FLUENCY

List all the things you think of when you hear the word "spin".

IT'S ALL ABOUT THE SPINNER!!!

FLEXIBILITY

The tire is flat on your bicycle and won't spin. List different items you could use for a tire or to fix a tire. Sketch and label your creation.

IT'S ALL ABOUT THE SPINNER!!!

ORIGINALITY

Many things use wheels as part of their design: cars, trucks, and even a wheelbarrow. Make your own creation that has at least one wheel. Explain how the wheel is important to your creation. What is your creation used for?

IT'S ALL ABOUT THE SPINNER!!!

ELABORATION

Transform this spinning top into your own creation. Add a creative title to your picture.



Quick and Easy Creative Thinking Ideas

	Fluency	Flexibility	Originality	Elaboration
Reading/Writing/ ELA	Brainstorm as many words as you can that are related to... Brainstorm as many words as you can to replace the word...	Think of different uses for a... (pencil, eraser, etc.) Write from the perspective of... (an inanimate object, different character, etc.)	Change a major element of a story. (plot twist, character, setting) Re-design a book cover, book blurb, etc.	Create a new chapter that was left out by an author. Transform a simple sentence into a "jazzy" one. Squiggle Writing.
Math (content and/or Calendar Math)	Brainstorm things that take less than a minute. Brainstorm things that change over time.	Think of other uses for a clock. Discuss how a number is like a letter. How is NOT like a letter?	Draw a picture of a face using only ovals and circles. Create a math picture to explain a number.	Transform a number into a picture. Transform a specific shape...
Science	Plants: Brainstorm words related to the word "petal".	Geography: Explain how the earth is like a fishbowl.	Create an illustrated lab report from the perspective of one of the chemicals or a material in the science lab.	Draw and annotate the image of a diagram.
Social Studies	Brainstorm different reasons for conflict.	Discuss how different rules or laws are useful. How are they NOT useful?	Create your own country/state/continent/city/habitat.	Design the cover of a yearbook from 1865.

Creative Thinking ideas for _____ Grade

	Fluency	Flexibility	Originality	Elaboration
Reading/Writing/ ELA Standard: _____ _____ _____				
Math (content and/or Calendar Math) Standard: _____ _____ _____				
Science Standard: _____ _____ _____				
Social Studies Standard: _____ _____ _____				

Clever Categories

	A	B	C
1. baby food.			
2. famous people			
3. things found in a desk			
4. vacation spots			
5. diseases			
6. items in a vending machine			
7. games			
8. movie titles			
9. things you wear			
10. things at the circus			
11. capitals			
12. colors.			



TECHNOLOGY

BLUEPRINT: Technology is embedded in our standards and we realize it is part of the future of education. We embed technology daily. We don't just allow the students to be consumers of technology we expect them to be producers of technology as well. We teach students that technology can be used for a variety of reasons: research, communication, creating, assessing, presenting, teaching, learning and for fun.

KIDS AT WORK: (How does this work and look in our classroom?)

Kahoot!: - <https://getkahoot.com/> - This is a game-based classroom response system which motivates student participation and rewards in a social setting. Create your Kahoot at this site.

Kahoot!: - <https://kahoot.it/#/> - student site to enter game pin and name.

Socrative - <http://www.socrative.com/> - This site allows teacher to engage and assess their students with educational activities on tablets, phones, or laptops. Provides excellent assessment results for students and teachers. Teacher login and Student login at this site.

Storybird: www.storybird.com Creating stories with illustration to share with others.

Wonderopolis: www.wonderopolis.org Students explore the "wonder of the day"

Capzles: <http://www.capzles.com/> Students create beautiful, interactive, rich-media timelines online using videos, photos, text, music, audio and most documents..

Zimmertwins: www.zimmertwinsatschool.com Students create original cartoons and text, plot, characters, etc. to share with others

Create a Graph: <http://nces.ed.gov/nceskids/createagraph/default.aspx> Students can choose various ways to create a graph after they have gathered data.

Virtual Manipulatives: <http://nlvm.usu.edu/> Great site for students to explore and apply math concepts using manipulatives.

Tellegami: <https://telligami.com/> Mobile app that lets you create and share a quick animated Gami video.

Tagxedo & Wordle: www.tagxedo.com and www.wordle.com Great tool for ELA related learning.

Draw a Stick Man: www.drawastickman.com Students utilize creativity and reading. Use gallery to help foster more interest.

Powtoon: <http://www.powtoon.com/> - Create your own animation.

QR Codes: <https://www.the-qr-code-generator.com/>

Brain Games: <http://channel.nationalgeographic.com/brain-games/> Excellent site for a variety of brain "games" and information about how your brain works.

RESOURCES/TOOLS: (This is just a few of our favorites!)

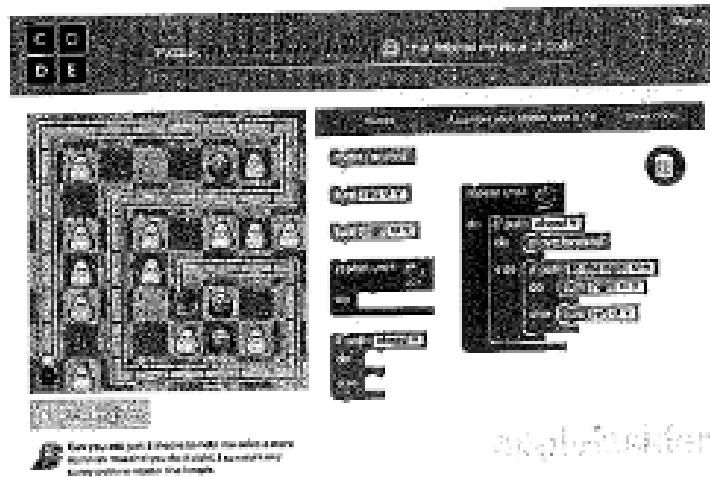
Laptops and devices. We encourage students to bring their devices to school on their SEARCH day.

CAUTION!!! Possible Roadblocks (things to watch for)

Not enough devices. Wifi issues. But...this is an issue EVERYWHERE so we consider it a patience builder!



HOUR OF CODE



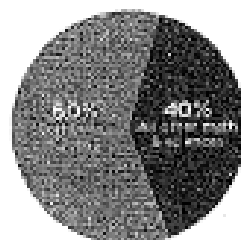
This year our students, grades 2-5, participated again in the global movement, Hour Of Code through www.code.org

What is this? Basically it is a movement for students to have exposure to computer science and coding. Click here to watch some of the videos with some familiar faces (Bill Gates, Chris Bosh, Barack Obama and more) that explain this further...

<https://hourofcode.com/us/promote/resources#videos>

Why Hour of Code?

The job/student gap in computer science



Jobs



Students

Less than 2.4% of college students graduate with a degree in computer science. And the numbers have dropped since last decade.

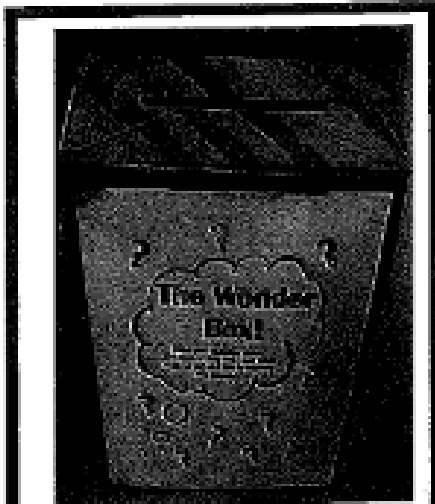
Start with one #HourOfCode



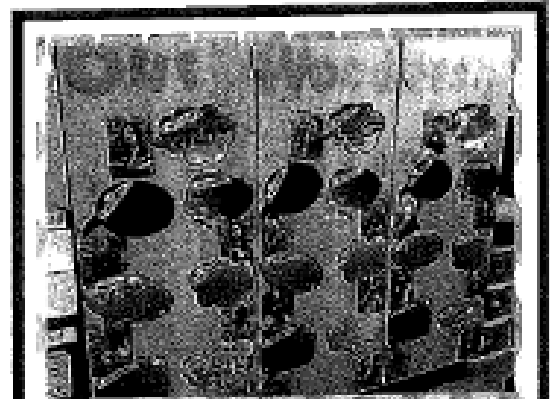
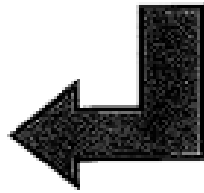
Are you a "WONDER-ER?"

Who asks the majority of the questions in your classroom?

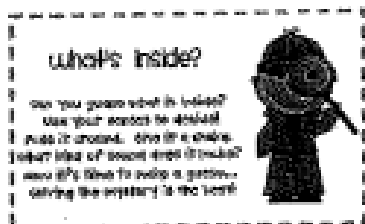
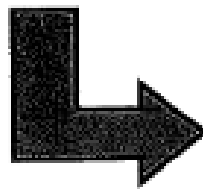
What kind of questions are being asked?



**Create a
Wonder or
Mystery Box**

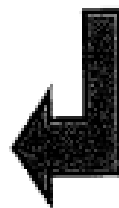
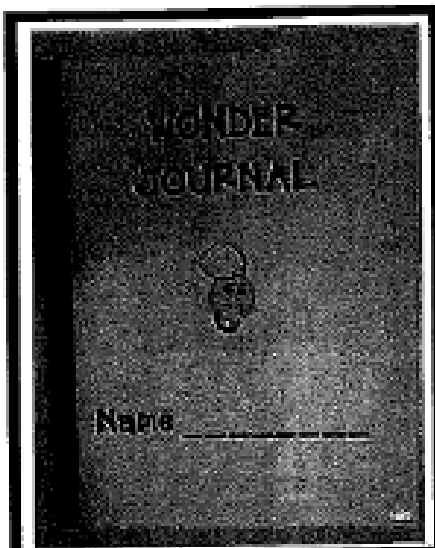


**Create a
Wonder Wall**



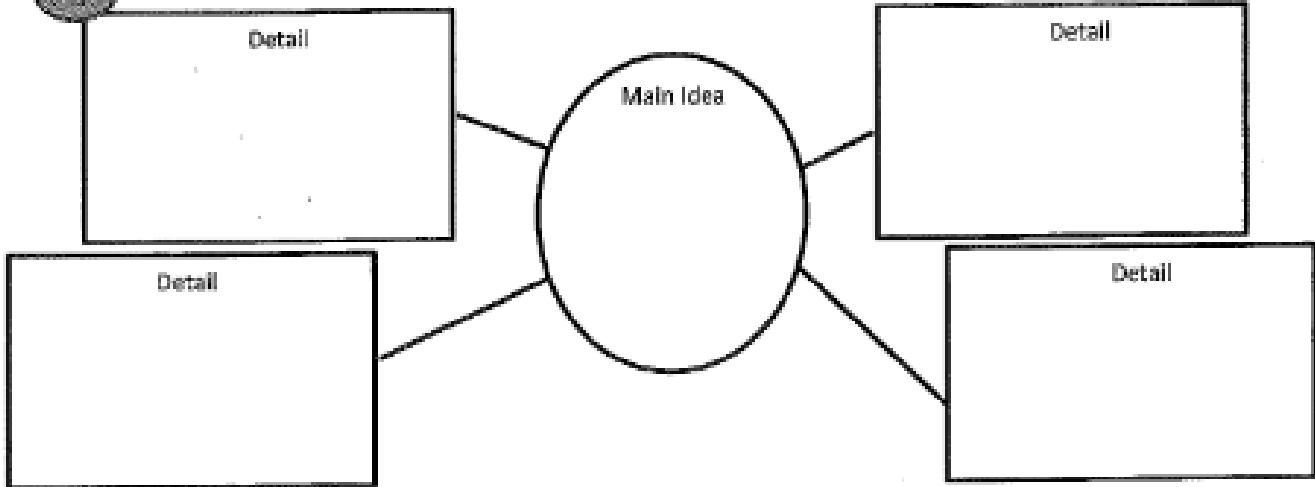
**Utilize Wonder
Journals**

Explore www.wonderopolis.org



3

Read the article and then fill out the main idea and details web below. Add more details if needed!



Name: _____

1

Before you read the wonder of the day, list what you already know about the topic.

Wonderopolis!
Wonder of the Day #: _____
Wonder of the Day Question: _____

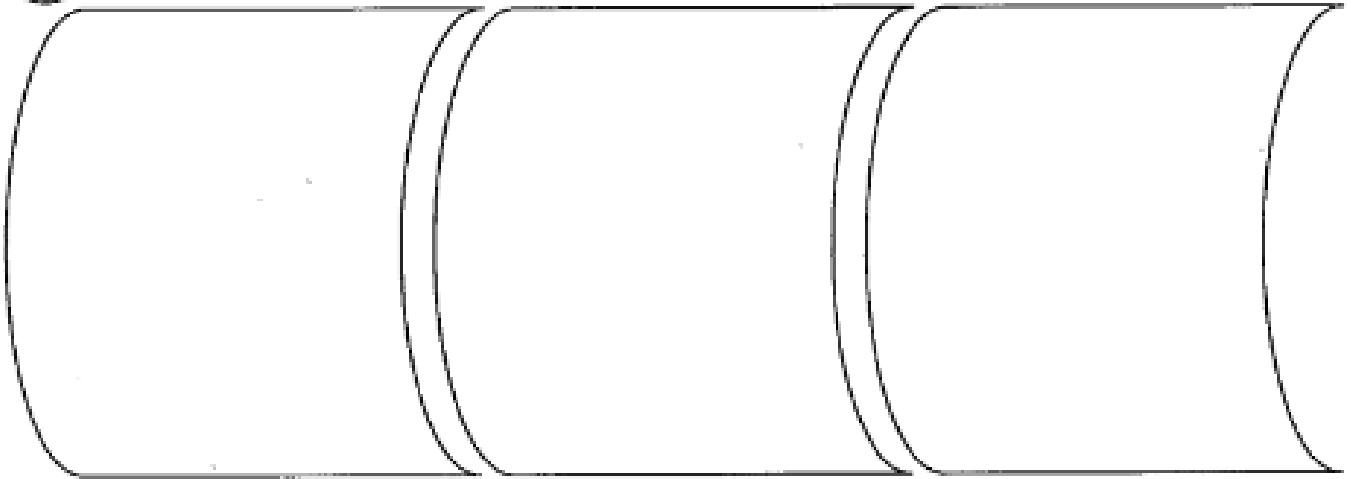
2

Click on the "wonder words" tab. Choose three unfamiliar words and list them below. Write the meanings when you read about them.

}	Word:	}	Meaning:	}
}	Word:	}	Meaning:	}
}	Word:	}	Meaning:	}

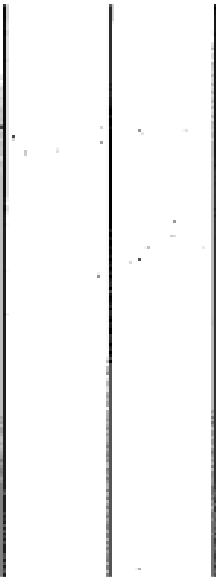
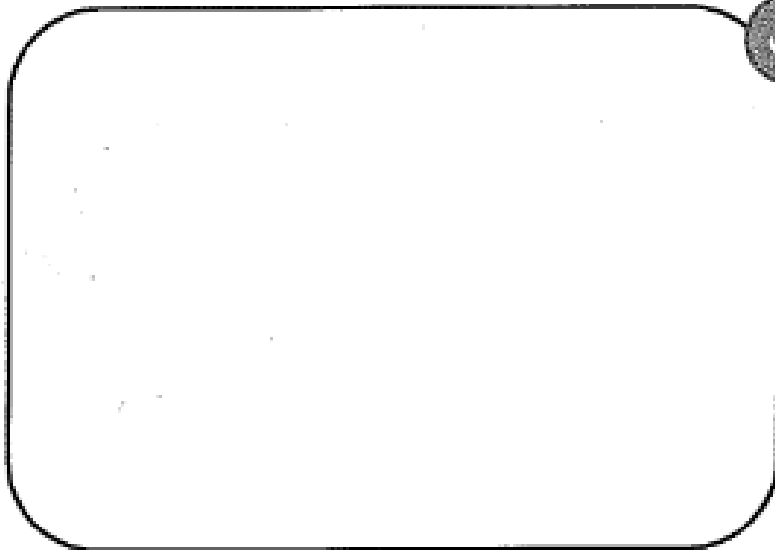
4

Now that you have read the article, explain three new things you learned. Use complete sentences and try to use "wonder words".



5

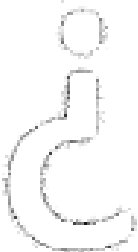
Use the box to create a drawing or diagram for the Wonder of the Day. Write a caption on the lines below.



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6

What questions do you still have about this topic?



CRITICAL THINKING/MATH PROBLEM SOLVING/LOGIC

BLUEPRINT: Math Logic, Critical Thinking, and Problem Solving are important components to our instruction. Math Logic includes logic puzzles where students are asked to use critical thinking skills. Students demonstrate critical thinking when they use analysis and evaluation to determine a judgment. Problem Solving involves multi-steps to answer higher order thinking questions or problems. Students are asked to defend and explain their thinking.

KIDS AT WORK: (How does this work and look in our classroom?)

STAY IN THE STRUGGLE—We often remind students to stay in the struggle when activities are difficult or problems not easily solved.

Albert's Insomnia - <http://albertsinsomnia.com/> This is a math game that our students love in all grade levels from second – fifth grade. This game is differentiated automatically by the grade level math skills that you can utilize to make your number sentences.

Matrix Madness—Puzzle Baron's Logic Puzzles, <http://www.logic-puzzles.org/faq.php> Student can solve matrix puzzles online and can pick the grid size of the puzzle. You can print some logic matrix puzzles at <http://www.printable-puzzles.com/> - great site for easy/challenging logic puzzle matrices.

RESOURCES/TOOLS:

Just Think! Activities to Develop Critical Thinking – these books are available in specific grade levels.

Primarily Logic for Primary Grades

Creative & Critical Thinking Activities – for grade levels 1-5 – we don't use these as worksheet books but rather pull ideas out of the book to use in teaching creativity.

Math-a-Logic by Dianne Draz

Red Herrings Science Mysteries (Solving Problems through Critical Questioning) by: M.A. Rockett

Dr. Funster's Think a Minutes

Mathematical ART-O-Facts Activities to Introduce, Reinforce or Assess Geometry & Measurement Skills by: Catherine Jones Kuhns – this book also integrates creative thinking.

Whose Clue's (various topics) by: Nathan Levy

CAUTION!!! Possible Roadblocks (things to watch for)

Time – it is important to make time for this so that students can practice and apply math concepts they have learned in the classroom.

STEM/LEGO WEDO ENGINEERING

BLUEPRINT: Science, Technology, Engineering and Math are integrated throughout our lessons and curriculum. All grades participate in STEM tasks. These are tasks that involve collaboration, communication, various science concepts, use of technology, application of math skills, creativity, etc. In addition, we also utilize Lego We-Do Kits. These kits allow opportunities for students to create various structures that are programmed through the computer. Students learn a variety of engineering concepts, document data, and apply basic computer programming skills (coding).

KIDS AT WORK: (How does this work and look in our classroom?)

STEM: We incorporate STEM tasks throughout all grade levels including kindergarten after they qualify. We have divided our STEM tasks into individual grade levels to prevent any repeats of tasks. This is also important because some STEM tasks require certain skills before you can compete other STEM tasks.

We send a STEM wish list home at the beginning of the year to our parents. We explained what is STEM and the importance of including these activities in our gifted program. The parents are more than willing to send in supplies.

Lego We-Do Learning Process (phases): Connect, Construct, Contemplate, Continue

Lego We-Do Kits Organization: We have our Lego kits numbered and partners assigned to each kit. This help with accountability for the million parts and pieces. At the very beginning of the year we go over rules/regulations for using the Lego We-Do kits and proper care for kits. These kits are very expensive but well worth the money! We store the Lego mini-figures separate from the kits because those are very popular items. We also have a box named: Lego LOST & FOUND.

Lego We-Do Kits Teacher Resources: The teacher resources/guides are excellent. It takes us some time to read through the details of building the kit, the curriculum guide, and other teacher resource information. It is well worth your time. It also helps the teacher realize that it is a lot harder than it looks! ☹ There are extension activities for each project that the students build. We have the student's record data and key engineering concepts in their "ORBIT" books. This way the information is handy at any time they need the information.

Lego and STEM: The engineering tasks require students to work collaboratively, build structures, problem solve, create graphs/data, etc.

RESOURCES/TOOLS:

TpT – Smart Chick – STEM Tasks

Design Squad Nation – <http://pbskids.org/designsquad/>

Science Buddies – <http://www.sciencebuddies.org>

Great Picture Books:

- *Galimoto* by: Karen Lynn Williams

- *Awesome Dawson* by: Chris Gall – a new hero saves the day armed with only a wrench, screwdriver and a pile of junk.

- *Violet the Pilot* by: Steve Breen

Advanced projects to do with Lego We-Do kits with pictures and directions.

<http://www.wedobots.com/2013/10/wedo.html>

CAUTION!!! Possible Roadblocks (things to watch for)

Lego We-Do kits are expensive.

Need to have replacement parts handy for lost parts.

STEM tasks could get expensive if you don't have parental support for supplies.



SEARCH Student Self Assessment



WELCOME
TO OUR GALAXY

STUDENT NAME: _____

Today in SEARCH my greatest strength was:

Write one way you can be creative in your classroom or at home.

In SEARCH I want to work on:

In SEARCH I would like to learn about:

☆☆☆☆

Group Work

_____ Working together towards the goal of completing my project/activity.

_____ Cooperating with my group.



SEARCH Student Self Assessment

WELCOME
TO OUR GALAXY

STUDENT NAME: _____

Today in SEARCH my greatest strength was:

List one way you can use creative thinking in your regular classroom or at home.

Next week I hope to

Improve on the
following:



Roller Coaster Physics Group Work

4 = Exemplary: Making progress above and beyond expectations.

3 = Proficient: Meeting expectations and accomplishing goals

2 = Making Progress: Making progress towards meeting expectations.

1 = Weak Progress: Making weak progress towards meeting expectations.

0 = Not Evidenced: Not meeting the expectations of the gifted program.

Please use the scale above to grade yourself on the following:

_____ Working together towards the goal of completing your roller coaster.

SPECIALTY TOOLS

BLUEPRINT: As much as we preach/teach creative thinking, critical thinking, use of technology, collaboration, communication, application of skills and authentic work, we have created some "personalized tools", specialty tools, that we use in our school with our gifted students. Some of these tools are school-wide programs where students share their knowledge with all students in the building. Other specialty tools are projects that students take ownership of and benefit in our gifted classroom.

KIDS AT WORK: (How does this work and look in our classroom?)

Wax Museum: Students participate in a wax museum where they dress up and portray a historical figure from the Georgia Performance Standards. Students will also create and/or find props to go with their display and tri-fold board, and create a push button to go with their wax museum display. Students need to know the information about their historic figure very well so that when people push their button they can begin talking as if they are the historical figure.

Diary of a Science Kid: For the presentation science standards come to life. Students research a specific science standard and demonstrate that understanding by developing a presentation/experiment to share with a school wide audience. Students are responsible for creating a tri-fold board, presentation and experiment/demonstration.

Science Mania – Students choose a science concept and experiment to share with the entire school. Students are responsible to share the "why" and "how" of the experiment school-wide. This is typically done outside due to there is always a Mentos & Diet Coke explosion.

Marble Madness: This is How We Roll (Roller Coasters): Students learn basic physics concepts used by engineers in designing today's roller coasters. Potential and kinetic energy, friction, gravity, building support, and Newton's Second Law of Motion. Students loved creating an original design of a gravity driven roller coaster made only with cardstock paper and Scotch tape. <http://paperrollercoasters.com/>

SEARCH Design Co. Card Project – Our Card Project is student led and incorporates project based learning. It is a multi-disciplinary project that includes writing, language arts, math, problem solving, creativity, economics and much more.

National Geographic Bee – Similar to a spelling bee but with geography! Students in grades 4-8 are eligible to participate in this nationwide geography bee prepared by the National Geographic Society. <http://www.nationalgeographic.com/geobee/>

Projects by Jen: <http://projectsbyjen.com/> Oreo Project, Lights Christmas Projects, Snowglobe Project, National Park Project...

WISH YOU WERE HERE!

Student Self Assessment

RESOURCES/TOOLS:

There are TONS of resources/tools that we utilize in all of the above.

CAUTION!!! Possible Roadblocks (things to watch for)

Organization is critical when working with students/trifold boards, props etc.

It takes a lot of time to put together a school-wide program. Plan way in advance and have fun!