

Harcourt Public School – Stage Three (Years 5 & 6)

Term 3, Week 9 – Offline Learning Unit



These tasks can be completed in your Homework book and returned to the school for marking when you are collecting the next week's work.

Monday

Morning	Task – Comprehension “A Solar Water Heater” <i>In this activity, we are learning to use strategies to read the information in a text to build an understanding of the text.</i> <i>To be successful at this activity you will need to:</i> <ul style="list-style-type: none">• understand the meaning of key words or phrases in the text.• make connections between your own knowledge and the information in the text. <u>Your Task</u> Go to Appendix 1 and read the text titled “A Solar Water Heater” - Informative Text Complete the comprehension quiz in Appendix 1. <u>Optional Challenge:</u> Follow the directions and make this solar water heater with materials you have at home. Take a photo of it and share it with your teacher. Did it work? How might you change it to improve its results?
Break	
Middle	Mathematics – Questions about Whole Number <i>In this activity, we are learning to describe properties of whole numbers.</i> <i>To be successful at this activity you will need to:</i> <ul style="list-style-type: none">• Read, write and order numbers of any size• Determine factors and multiples of whole numbers• Recognise the location of negative numbers in relation to zero on a number line Go to Appendix 2 and complete the Whole Number question worksheet.
Break	
Afternoon	Creative arts – Music with Ms Kelly – “Write about music” Go to Appendix 3 for the instructions and worksheets for today's lesson to find the stories behind the songs. Enjoy.

A SOLAR WATER HEATER

A solar water heater **captures** heat from sunlight and stores it in water. Heat is absorbed by **dark, dull** surfaces and reflected from light, shiny ones. A solar water heater uses both types of surfaces. It works even in winter!

Requirements

- 2 squares of black plastic sheet (each 1m x 1m)
- aluminium foil
- coat hanger wire
- plastic garden hose
- bricks or stones (weights)
- and most importantly - a sunny day!



Steps

1. Spread one square of plastic on the ground in a sunny place. Use small wire loops to **pin** it down.
2. Cover the plastic with the aluminium foil. Use wire loops to pin this in place too.
3. Make the hose into a tight, flat coil that touches itself all the way round. One end has to be connected to a tap, the other should just poke out from the plastic square. The coiled hose must lie on the aluminium foil (Fig. 1).
4. Cover the hose coil with the other plastic square so that it makes as much contact with the hose as possible. It is best to stretch it tightly over the hose and weigh down the edges with bricks or stones, to keep out cold air (Fig. 2).
5. Turn on the tap and let the water trickle through.

The black plastic must be clean. It absorbs heat which warms the water in the hose. Heat that escapes downwards is reflected back by the shiny foil.

Here are some ways to improve your solar heater.

1. Lay the bottom sheet on an insulating material, eg. old carpet.
2. Paint the coiled garden hose black.
3. Add an extra layer of clear plastic a few centimetres above the top black plastic, making sure no breeze can get under it to blow the warm air away. It is using the same techniques that are used to keep hothouses warm.
4. Attach the heater to a piece of chipboard, and angle this towards the sun.

Figure 1

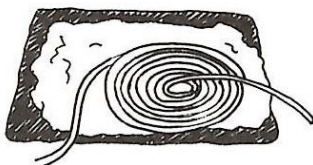
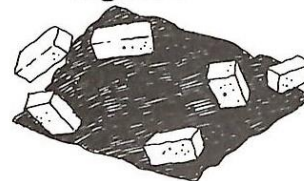


Figure 2



Comprehension Quiz for “A Solar Water Heater” - Monday

Question 1: For all solar heaters it is essential to have:

- a. Bricks
- b. Sunlight
- c. Electricity
- d. Aluminium foil

Question 2: In the instructions the word **captures** could be replaced with:

- a. Collects
- b. Arrests
- c. Locates
- d. Attracts

Question 3: The plastic is black so that it will:

- a. Hide the hose
- b. Reflect the light
- c. Absorb the sun’s heat
- d. Shade the aluminium

Question 4: The heater will NOT work:

- a. Outside
- b. At night
- c. In winter
- d. Early morning

Question 5: If you cannot find bricks you could use:

- a. A hose
- b. Stones
- c. A board
- d. Coat hangers

Question 6: By attaching the heater to a board you can:

- a. Put it in the shade.
- b. Take it inside at night.
- c. Place away from the tap.
- d. Angle it towards the sun

Question 7: One way to improve your heater is to:

- a. Paint the hose black
- b. Remove the aluminium foil
- c. Let a breeze pass over the heater
- d. Suspend a shade just above the hose

Question 8: In Step 1 the word **pin** could be replaced with:

- a. Sew
- b. Bend
- c. Lock
- d. Hold

Question 9: The opposite to a dark, dull surface is a:

- a. Light, shiny surface
- b. Bright, slippery surface
- c. Colourful, glossy surface
- d. Smooth, colourless surface

Question 10: Read this sentence.

“The backyard was in a dreadful **state** after the party.”

Choose the sentence below which has the word state with the same or a similar meaning.

- a. Judy’s trip across the **state** border was at night.
- b. The officer told us to **state** the reason for being on the oval.
- c. When Ms Brown saw the **state** of the Art Room she was less than happy.
- d. The governor made a **state** visit to the festival.

Maths Activity – Appendix 2 - Whole Number - Monday

Answer the following questions.

Question 1: Place Value

a. Arrange the following numbers in ascending order:

46 827, 468 455, 250 015, 12 698

b. Arrange the following numbers in descending order:

306 107, 408 453, 115 468, 89 632,

c. 160 can be written as $100 + 60$. Write two other ways 160 could be split.

Question 2: Rounding

Round the following numbers to the closest **hundred**

a. 245 =

b. 690 =

c. 5169 =

Question 3: Factors

a. List all the factors of 64

b. List the highest common factor of 15 and 35

c. List the highest common factor of 81 and 54

Question 4: Multiples

a. List all the multiples of 8 under 100

b. List the lowest common multiple of 48 and 24

Question 5: Integers

- a. What is an integer?
- b. Place the following numbers on the number line below: 5, -4, 3, 0, 1, -3, -2, -1, 4, -5, 2



- c. Write if the following statements are true or false.

$-5 > 0$ _____

$3 < -4$ _____

$6 > -2$ _____

Question 6: Prime and Composite Numbers

- a. What is a prime number?
- b. List all the prime numbers from 1 to 20
- c. Explain why 22 is not a prime number.

Question 7: Square and Triangular Numbers

- a. Look at the pattern of square numbers below. Describe what happens in the pattern and find the next three terms.

Square numbers



- b. Look at the pattern of triangular numbers below. Describe what happens in the pattern and find the next three terms

Triangular numbers



Write About Music

Find the stories behind the songs!

Materials: Pencil and paper

Time: 30 minutes



Find more resources at [artslive.com](https://www.artslive.com)



Learn

Songs have been used to tell stories throughout history to teach about the land we live in, ways to work with others, feelings we have and heroic adventures. Songs can be as simple as nursery rhymes like Humpty Dumpty or Three Blind Mice, and can be very complicated like symphonic music that is played by an orchestra.

Songs or pieces of music are often divided up into sections. The way these sections fit together is known as 'musical form'.

There are two sections that appear in most modern music. They are the 'verse' and the 'chorus'.

The chorus contains the main lyrical and musical idea in the song and tends to stay the same throughout the song. Verses feature similar melodies as the chorus but the lyrics in the verse are different each time around. The verse often tells the story of the song

A simple form of a song can be:

- Verse 1
- Chorus
- Verse 2
- Chorus
- Chorus

Most songs have sections other than verses and choruses, such as introductions, bridges (or 'middle 8s'), solos and pre-choruses.

Listen and Write

Choose two of your favourite songs and use the questions on the the next page to think about those songs.

Write your responses on the blank pages at the end of the activity.



Write About Music

Find the stories behind the songs!



Materials: Pencil and paper

Time: 30 minutes

Find more resources at [artslive.com](https://www.artslive.com)

Song Title	<ul style="list-style-type: none">• Does this give a clue to what the song is about?• Why do you think the song is called this?
Chorus	<ul style="list-style-type: none">• Does the title of the song appear in the Chorus?• What is the main message of the Chorus?• Do each of the lines in the Chorus rhyme or not? Can you give an example?• How does the music change? – does it get louder/ softer? Use different instruments? Have more people singing?• Are there lots of words in the Chorus or words that are repeated?
Verse	<ul style="list-style-type: none">• What parts of the story does each Verse tell?• Does the story in each Verse make a sequence of events? Write these down in order• Are there repeated words/ phrases in each Verse?• How many people are singing?• Does the music sound different to the Chorus? Describe some of the differences in sound you can hear.
End of the Song	<ul style="list-style-type: none">• How does the song end?• Does it repeat a phrase and fade out?• Does it have a definite finish?• Does it use music from the Chorus or Verse or does it have its own music?
Form	<ul style="list-style-type: none">• Write out the Form of your song – list each section in order as you hear it.



Write About Music

Find the stories behind the songs!

Materials: Pencil and paper

Time: 30 minutes



Find more resources at [artslive.com](https://www.artslive.com)

Song One

Song Title

Chorus

Verse

End of the Song

Form



Write About Music

Find the stories behind the songs!



Materials: Pencil and paper

Time: 30 minutes

Find more resources at [artslive.com](https://www.artslive.com)

Song Two

Song Title

Chorus

Verse

End of the Song

Form



Tuesday

Morning

English – Writing

In this activity, we are learning to build our knowledge about a topic.

To be successful at this activity you will need to:

- describe the different impacts a volcanic eruption can cause
- understand the processes that cause natural disasters

To be experts about a topic, we need to help others by “building the field”. This means that we help others learn more about the topic by showing them background information to understand how or why something works. For example, teachers build the field about the topic by introducing new information before we start writing informative texts.

Read Appendix 1a – Effects of a volcanic eruption

Then complete Appendix 1b – Volcanic eruptions quiz

Break

Middle

Mathematics – Volume and capacity conversions

In this activity we are learning to find convert units of measurement of capacity.

To be successful at this activity you will need to:

- convert litres (L) to millilitres (mL), multiplying by 1000
- convert millilitres (mL) to litres (L), dividing by 1000

1st: View the Volume and Capacity Conversion slides (Appendix 2a)

2nd: Complete the Wk9 Volume and Capacity Conversion quiz (Appendix 2b).

Break

Afternoon

PDHPE – What does it mean to be healthy?

In this activity, we are learning to describe what it means to be healthy.

To be successful at this activity you will need to:

- describe different aspects of life I can be healthy in
- create a healthy and balanced diet

Create an informative poster giving health advice to a Stage 2 (Year 3 and Year4) student about healthy eating and staying healthy. In your video or poster, you should include information about:

- What is healthy eating? (don't forget hydration!)
- What makes a balanced diet?
- What should a healthy lunchbox include?
- How can we check if our foods are healthy and balanced?
- What is a way we can make eating healthy exciting?

PDHPE Outcomes: PD3-6 distinguishes contextual factors that influence health, safety, wellbeing and participation in physical activity which are controllable and uncontrollable.

Writing Activity – Appendix 1a – Effects of a volcanic eruption - Tuesday

Volcanic eruptions can be both heard and seen. Extremely hot lava oozes out from the volcano through the crater and vents. This causes extensive damage to the area near or around the volcano as the lava scorches and burns everything it encounters. Catastrophic and violent eruptions release huge amounts of gases and rocks as an explosion into the air where pyroclastic flows are formed from the immense pressure. Pyroclastic flows roll down the sides of the volcano as a mixture of extremely hot toxic gases and volcanic ash, moving as fast as a cyclone burning everything in its way. Volcanoes also have other deadly aftereffects. Earthquakes and tsunamis are created due to the violent trembling in the Earth’s crust causing damage to tall buildings and flooding coastlines. Not only do volcanoes cause tremendous amounts of damage, but volcanoes can also benefit the natural environment. The hot ash from a volcano breaks down and enriches the land making it extremely fertile and healthy to grow new plants. The heat generated from eruptions can be used to produce electricity, as heat creates steam when in contact with water, and this in turn can be used to drive turbines.

Writing Activity – Appendix 1b (Volcanic eruptions quiz) - Tuesday

1. True or False. A volcano can be both seen and heard.

.....

2. What is it called when magma slowly oozes out from a volcano and moves across land?

- Magma river
- Lava flow
- Lava ocean

3. Why would a lava flow be dangerous?

.....

.....

4. What can be released into the air during a volcanic eruption?

.....

.....

5. A pyroclastic flow travels...

- Up into the air
- Down the side of a volcano

6. What other natural disasters could a volcanic eruption cause?

.....

.....

Maths – Appendix 2a: Volume and Capacity Conversion slides - Tuesday

Volume & Capacity Conversions

1

Why is converting between units of measurement necessary?


To be able to convert between the various units of measurement makes it easier and more accurate when solving problems.

Common units of measurement for capacity include: Millilitre (mL) and litre (L) and it is important to be able to convert between the two.

2

How do we find equivalent units of capacity?

1000 mL = 1 L



The word **equivalent** means equal. We can compare different units of measuring capacity with millilitres and litres. To do this, we need to know how many millilitres equal 1 litre. As you can see 1000 mL is equivalent to 1 L.

3

Converting between units



Here you can see that when we convert from litres (L) to millilitres (mL), we multiply by 1000.

When we convert between millilitres (mL) to litres (L), we divide by 1000.

4

Converting mL to L

Sometimes, when we are converting between units, it may involve decimals. The reason for this is that when we divide by 1000, the value of each digit is divided, sometimes giving a decimal answer. So let's have a look at how to do this accurately.

To mentally **divide decimals by 1000, slide the digits three places to the right.**

Example: If we have 3650 mL but we need to convert this to L, then we need to divide by 1000.

So, we have **3 6 5 0 mL**
(If there is no decimal already in place, place a decimal at the end to help).
3 6 5 0 .

Then, we need to slide the digits three places to the right. The number now becomes:
3 . 6 5 0 L

Also, if a zero is the final number, then you can also read the number as 3.65 L, because it is the same.

5

Converting L to mL

When we multiply by 1000, each digit moves three places to the left because multiplying increases the number, as the value of each digit is multiplied.

To mentally **multiply decimals by 1000, slide the digits three places to the left.**

Example: If we have 2.475 L but we need to convert this to mL, then we need to multiply by 1000.

So, we have **2 . 4 7 5 L**

Then, we need to slide the digits three places to the left. The number now becomes:
2 4 7 5 mL

6

Wk9 Volume and Capacity Conversion Quiz

Converting between units of measurement

Converting litres (L) to millilitres (mL)

To convert from litres to millilitres, multiply by 1000.

1. 5 L = how many mL
2. 3.6 L = how many mL
3. 4.95 L = how many mL
4. 12.83 L = how many mL
5. 0.75 L = how many mL
6. 0.105 L = how many mL

Converting between units of measurement

Converting millilitres (mL) to litres (L).

To convert from millilitres to litres, divide by 1000.

7. 6000 mL = how many L
8. 2800 mL = how many L

9. 4250 mL = how many L

10. 2010 mL = how many L

11. 14 625 mL = how many L

12. 812 mL = how many L

13. 35 mL = how many L

14. How many millilitres in 8.025 litres?

- 8,025 mL
- 80, 250 mL
- 825 mL

Wednesday

Morning

Task 1 - English – Informative Writing Activity

In this activity, we are learning to write informative texts that make us sound like the expert.

To be successful at this activity you will need to:

- *Identify tier two and three language.*
- *Explain why the writer has chosen to use tier two and three words.*

Your Task:

- Read Appendix 1 - "Effects of a volcanic eruption"
- List tier three words for this paragraph. Then list tier two words.
- Explain: why do writers try to fill informative texts with accurate tier 2 and tier 3 words?

Break

Middle

Mathematics – Numbers and Algebra Revision

In this activity, we are learning about number patterns involving all four operations.

To be successful at this activity you will need to:

- identify and continue number patterns involving addition, subtraction, multiplication and division
- Use equivalent number sentences involving multiplication and division to find unknown quantities

Go to Appendix 2 and complete the Number Patterns revision questions.

Break

Afternoon

Health and Wellbeing Activity - Screen breaks are important!

Did you know that screen breaks are an essential part of your learning?

Regular breaks help you to reduce your stress and they also help your eyes to focus on something else at different distances away from you. A screen break also makes you move your body so that your blood flow increases, you oxygenate your brain, and your muscles move and flex.

Recent research has shown that our brains aren't idle when we take breaks. Instead, they are hard at work processing memories and helping us make sense of what we experience. Thus, screen breaks are crucial for consolidating memories, reflecting on past experiences, and planning for the future—in other words, it helps shape how we make sense of our lives.

Overall, screen breaks keep our brains healthy and play a key role in cognitive (brain) abilities such as comprehension (understanding something) and thinking up new ideas or things to try.

Your Task:

Create a screen break video 'script'.

Your video script needs to take less than 2 minutes to perform.

In your screen break video script, you need to make a suggestion of what the person could do instead of looking at a screen eg. Go for a walk.

Writing Activity – Appendix 1 (Effects of a volcanic eruption) - Wednesday

Volcanic eruptions can be both heard and seen. Extremely hot lava oozes out from the volcano through the crater and vents. This causes extensive damage to the area near or around the volcano as the lava scorches and burns everything it encounters. Catastrophic and violent eruptions release huge amounts of gases and rocks as an explosion into the air where pyroclastic flows are formed from the immense pressure. Pyroclastic flows roll down the sides of the volcano as a mixture of extremely hot toxic gases and volcanic ash, moving as fast as a cyclone burning everything in its way. Volcanoes also have other deadly aftereffects. Earthquakes and tsunamis are created due to the violent trembling in the Earth's crust causing damage to tall buildings and flooding coastlines. Not only do volcanoes cause tremendous amounts of damage, but volcanoes can also benefit the natural environment. The hot ash from a volcano breaks down and enriches the land making it extremely fertile and healthy to grow new plants. The heat generated from eruptions can be used to produce electricity, as heat creates steam when in contact with water, and this in turn can be used to drive turbines.

Maths Activity – Appendix 2 – Numbers and Algebra Revision - Wednesday

1. A **pattern** is best described as:
 - a. An ordered set of numbers arranged according to a rule
 - b. A set of numbers arranged in a random order
 - c. An ordered set of numbers that are multiplied again and again
2. Identify the rule in the following sequence: **28, 36, 44, 52**
 - a. +6
 - b. +7
 - c. +8
 - d. +9
3. Identify the missing number in the sequence: **823, 846, _____, 892**
 - a. 858
 - b. 865
 - c. 860
 - d. 869
4. Find the unknown quantity in the number sentence **5 x _____ = 80**
 - a. 13
 - b. 15
 - c. 16
 - d. `8
5. Find the unknown quantity in the number sentence **____ x 9 = 108**
 - a. 10
 - b. 11
 - c. 12
 - d. 13

6. Find the unknown quantity in the number sentence $56 \div \underline{\hspace{1cm}} = 8$

- a. 8
- b. 9
- c. 11
- d. 12

7. Balance the number sentence by finding the unknown quantity:

$$6 \times \underline{\hspace{1cm}} = 60 + 6$$

- a. 6
- b. 8
- c. 10
- d. 11

8. Balance the number sentence by finding the unknown quantity:

$$4 \times 3 = 36 \div \underline{\hspace{1cm}}$$

- a. 12
- b. 3
- c. 4
- d. 9

9. Balance the number sentence by finding the unknown quantity:

$$90 \div 9 = \underline{\hspace{1cm}} - 17$$

- a. 27
- b. 10
- c. 37
- d. 20

10. What is the rule for the following number pattern?

$$1\frac{5}{8}, 1\frac{6}{8}, 1\frac{7}{8}$$

- a. increasing by $\frac{1}{8}$
- b. decreasing by $\frac{1}{8}$
- c. increasing by 1
- d. decreasing by 1

11. What is the rule for the following number pattern?

$$1\frac{1}{6}, 1\frac{2}{6}, 1\frac{3}{6}$$

- a. increasing by 1
- b. decreasing by 1
- c. decreasing by $\frac{1}{6}$
- d. increasing by $\frac{1}{6}$

12. Answer the following question: $6 + 7 + 9 \times 3$

- a. 66
- b. 40
- c. 78
- d. 31

13. Answer the following question: $49 \div 7 - 30 \div 6$

- a. 7
- b. 14
- c. 2
- d. 32

14. Answer the following question: $20 \div 5 + 10 \div 2$

- a. 9
- b. 6
- c. 24
- d. 38

15. Answer the following question: $30 - 6 \times 2 + 10$

- a. 46
- b. 19
- c. 39
- d. 28

16. True or False: $3 \times 12 + 5$ is equivalent to $50 - 9$

- a. True
- b. False

17. True or False: $146 + 10 - 2$ is equivalent to $50 \times 2 + 54$

- a. True
- b. False

Thursday

Morning

Writing

In this activity, we are learning to demonstrate our knowledge on the effects of volcanos.

To be successful at this activity you will need to:

- *Illustrate my understanding of the effects of a volcano*
- *Label my illustrations using words from a given text.*

Activity

- Read text on Effects of Volcanoes (Appendix 1).
- Notice that it is highlighted. Each effect is in a different colour. The yellow highlighting is about pyroclastic flows, the rose highlighting is about earthquakes and tsunamis, and so on.
- Use the highlighted sections of the text to complete the brainstorm (in Appendix 1) to illustrate your understanding of the effects of a volcano. The first effect, highlighted yellow, about pyroclastic flows is done for you with a diagram and labels.
- Include your own diagrams AND labels that clearly illustrate and explain your understanding of the effects of volcanoes.

Break

Middle

Mathematics – Questions about Fractions and Decimals

In this activity, we are learning understand fractions as numbers and as operators .

Success criteria: I can

- *Write fractions in their simplest form*
- *Find unit fractions of quantities using division*
- *Add, subtract and multiply fractions*
- *Convert between fractions, decimals and percentages*

Go to Appendix 2 complete the questions on Fractions

Break

Afternoon

Book Review

You are learning to deliver an effective speech

To be successful you will:

- *maintain eye contact*
- *use a loud voice*
- *speak clearly*
- *use an effective pace*
- *give at least 3 reasons for your opinion*
- *use hand gestures*

Choose ONE of the following topics and deliver a 60 second speech:

- Would you rather have a dragon or be a dragon?
- Would you rather win an Olympic Gold medal or be in a popular band?
- Would you rather be famous and followed everywhere or not famous and left alone?
- Would you rather live now or live in the year 3000?
- Free choice topic

Read the success criteria carefully to ensure you deliver an effective speech. Make sure you have at least 3 relevant reasons to support your opinion. Speak at an effective pace (not too fast or too slow). You can use hand gestures and an expressive voice to make your point clear. If you have notes, use them to remember your points.

Deliver your speech to a family member (or in front of a mirror). Write two positive comments about your speech (e.g. I gave 3 strong reasons and I spoke clearly) and one area you could improve on (e.g. I did not look up from my notes).

SPEAKING SKILLS FOR ORAL PRESENTATIONS



TONE

Tone is the expression and feeling in a speaker's voice.

The tone helps keep listeners interested and can help them form an emotional reaction to the speech.

The tone should match the content of the speech, e.g. a serious subject should have a serious tone, but a speech meant to entertain should have a fun, happy tone.



PACE

Pace is the speed of your speech.

A good pace should be not too fast but not too slow.

A speaker's words should be slow enough to be easily understood but fast enough that the speech flows at a steady rate.



VOLUME

Volume is how loud a speaking voice is.

It is important to speak loudly enough for people to hear your words clearly at the back, but not so loud that it is distracting for the audience.



GESTURING

Gestures are movements of the body.

Good gestures help emphasise what is being said and hold the audience's attention.

Gestures should be small so they do not distract the listeners, e.g. small hand or head movements and facial expressions.



EYE CONTACT

Eye contact means looking at the audience.

Making eye contact creates a connection between the speaker and the listeners.

A speaker should look up as much as possible during a speech.

Appendix 1 – Effects of Volcanoes - Thursday

Volcanic eruptions can be both heard and seen. Extremely hot lava oozes out from the volcano through the crater and vents. This causes extensive damage to the area near or around the volcano as the lava scorches and burns everything it encounters. Catastrophic and violent eruptions release huge amounts of gases and rocks as an explosion into the air where pyroclastic flows are formed from the immense pressure. Pyroclastic flows roll down the sides of the volcano as a mixture of extremely hot toxic gases and volcanic ash, moving as fast as a cyclone burning everything in its way. Volcanoes also have other deadly aftereffects. Earthquakes and tsunamis are created due to the violent trembling in the Earth's crust causing damage to tall buildings and flooding coastlines. Not only do volcanoes cause tremendous amounts of damage, but volcanoes can also benefit the natural environment. The hot ash from a volcano breaks down and enriches the land, making it extremely fertile and healthy to grow new plants. The heat generated from eruptions can be used to produce electricity, as heat creates steam when in contact with water, and this in turn can be used to drive turbines.

Your Brainstorm

Violent eruption releasing huge amounts of gas



Pyroclastic flow rolls down side of volcano



Maths activity - Appendix 2 – Fractions and Decimals - Thursday

Answer the following questions.

QUESTION 1 Complete the following to make equivalent fractions.

a $\frac{1}{2} = \frac{\quad}{4}$

b $\frac{1}{3} = \frac{\quad}{6}$

c $\frac{1}{5} = \frac{\quad}{10}$

d $\frac{1}{10} = \frac{\quad}{100}$

e $\frac{7}{10} = \frac{\quad}{50}$

f $\frac{1}{5} = \frac{\quad}{100}$

g $\frac{3}{5} = \frac{\quad}{40}$

h $\frac{3}{4} = \frac{\quad}{16}$

i $\frac{2}{7} = \frac{\quad}{21}$

j $\frac{3}{8} = \frac{\quad}{64}$

k $\frac{5}{6} = \frac{\quad}{24}$

l $\frac{4}{7} = \frac{\quad}{35}$

m $\frac{7}{8} = \frac{\quad}{24}$

n $\frac{2}{9} = \frac{\quad}{81}$

o $\frac{3}{4} = \frac{\quad}{20}$

p $\frac{2}{3} = \frac{8}{\quad}$

QUESTION 2 - Find the missing number to complete the equation.

a $\frac{5}{20} = \frac{\quad}{4}$

b $\frac{18}{36} = \frac{1}{\quad}$

c $\frac{8}{20} = \frac{4}{\quad}$

d $\frac{16}{20} = \frac{4}{\quad}$

QUESTION 3 - Simplify the following fractions

a. $10/20 =$

b. $30/50 =$

c. $40/100 =$

d. $75/100 =$

e. $25/100 =$

f. $8/12 =$

g. $12/36 =$

h. $10/100 =$

QUESTION 4 Solve the following problems. Write your answers in the simplest form.

a. Louis scored 16/20 on a test. What fraction was incorrect?

b. Mischa scored 12/20 on the same test. What fraction did she get right?

c. 25 out of the 75 kids in Year 6 ride their bikes to school. What fraction does this represent?

d. Out of the 26 students in 6A, 14 rate Maths as their favourite subject. What fraction is this?

e. What fraction did not choose Maths as their favourite subject?

QUESTION 5 Converting fractions to decimals

- a. $4/10=$
- b. $9/10 =$
- c. $10/10=$
- d. $61/100=$
- e. $80/100=$
- f. $55/100=$

QUESTION 6 Converting fractions to percentages

- a. $60/100=$
- b. $30/100=$
- c. $9/10=$
- d. $25/100=$
- e. $45/100=$
- f. $3/4=$
- g. $89/100=$
- h. $1/2=$

QUESTION 7 We use fractions of time regularly in our lives. Use the clock to work out the following:



- a. What fraction of an hour is 15 minutes?
- b. What fraction of an hour is 30 minutes?
- c. What fraction of an hour is 45 minutes?
- d. What fraction of an hour is 20 minutes?
- e. If Cody practises guitar from 4:20 to 4:35 each day, what fraction of an hour does this represent?
- f. Ju Hee practises soccer for 1 hr 15 min. How would you express that as an improper fraction?

QUESTION 8 Find the following fractional amounts

a $\frac{2}{4}$ of 12 =

b $\frac{5}{6}$ of 30 =

c $\frac{3}{4}$ of 24 =

d $\frac{3}{8}$ of 96 =

e $\frac{9}{10}$ of 20 =

f $\frac{3}{5}$ of 350 =

QUESTION 9: Adding and subtracting fractions.

a. $\frac{1}{4} + \frac{2}{4} =$

b. $\frac{2}{5} + \frac{1}{5} =$

c. $\frac{1}{4} + \frac{1}{2} =$

d. $\frac{2}{5} + \frac{6}{10} =$

e. $\frac{4}{5} - \frac{2}{10} =$

f. $\frac{4}{6} + \frac{2}{3} =$

g. $\frac{3}{4} - \frac{1}{2} =$

h. $\frac{3}{4} + \frac{1}{8} =$

i. Brad ate $\frac{2}{6}$ of a packet of chips. Jen ate $\frac{2}{3}$ of a packet of chips. How much did they eat altogether?

QUESTION 10 Multiplying fractions (remember we multiply the numerators and then we multiply the denominators. We simplify the fraction if needed)

a. $\frac{1}{2} \times \frac{1}{2} =$

b. $\frac{1}{2} \times \frac{1}{3} =$

c. $\frac{1}{3} \times \frac{2}{3} =$

d. $\frac{1}{10} \times \frac{1}{4} =$

e. $\frac{2}{5} \times \frac{3}{6} =$

Friday

Morning

To-do List Wellbeing Activity (part 1)

In this activity, we are learning to acknowledge and accomplish things in our life right now.

To be successful at this activity you will need to:

- Write a list of 10 things you can/would like to accomplish right now
- Number these items in order from most likely to least likely to accomplish.

Less is more if it leads to taking action and ticking items off a To-Do List. You could accomplish these things in a day, an afternoon, an hour or even a single minute.



Task: Write a list of 10 things you can/would like to accomplish right now (even if we are limited with the current lockdown).

These things don't have to be big, grand and adventurous. They could be sweet gestures for family or friends, new self-care rituals or things you've always wanted to do but haven't gotten around to yet. Examples could include - watch the sunrise/sunset, learn a magic trick, clean your bedroom, complete a 1000-piece jigsaw puzzle.

Number these items in your To-Do List from 1-10, number 1 being the item you will most likely do first.



Break

Middle

Keeping active!

In this activity, we are learning engage in physical activity to keep active and healthy.

To be successful at this activity you will need to:

- engage in physical activity
- reflect on your movements

Your task:

1) Complete a home workout that requires no gym equipment and only household items.

Warm-up:

TUCK JUMPS: Do 10 tuck jumps. Jump up and tuck knees up to chest. Land with knees bent. Rest, then repeat until warm.

Main workout:

Create a new exercise routine from last week, you may utilise *Appendix 1* for ideas to include in your exercise. Your workout should be approximately 30 minutes in length and can be one or a mixture of:

- Dance routine
- Cardio
- Body weight/resistance
- Balance e.g. Yoga

Cool down:

Don't skip this: Skip for a designated distance, gradually reducing the skipping speed and length until skipping slowly in one place. Reduce to a march, then to a walk in place.

IMPORTANT NOTE: If you feel like you are not physically able or are uncomfortable in any way, you **MUST STOP** an activity **immediately** to avoid injury.

2) Once you complete the workout, please complete the reflection form (*Appendix 2*).

Break

Afternoon

STEM ACTIVITY - It's time to think outside the box!

Task: BUILD A SPAGHETTI TOWER

In this activity, we are learning about designing and engineering skills with a few simple materials.

To be successful at this activity you will need to:

- Build a tower out of dry spaghetti.
- Build the tallest and strongest spaghetti tower that can hold the weight of a jumbo marshmallow (*or something similar*)
- Construct the tower in a time limit (*optional*)



What you need:

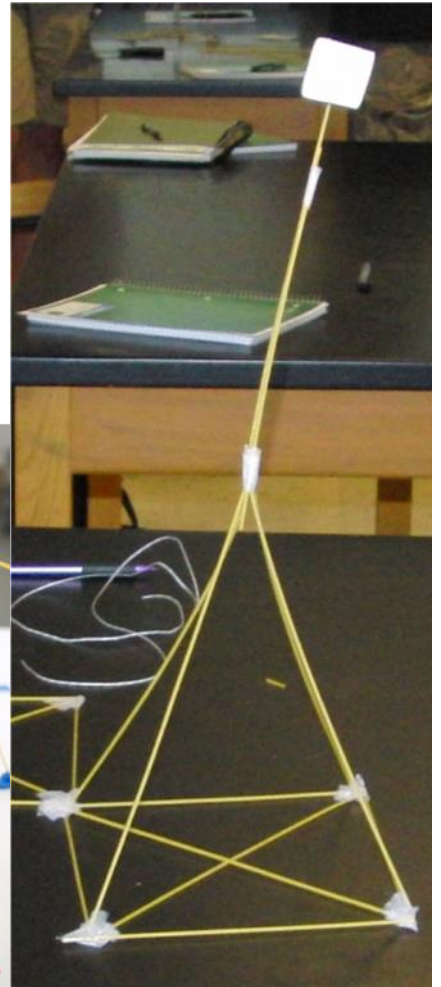
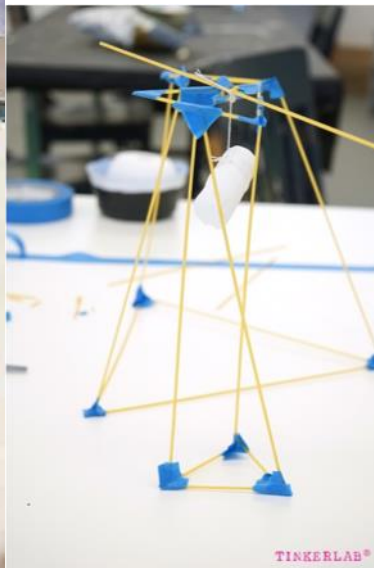
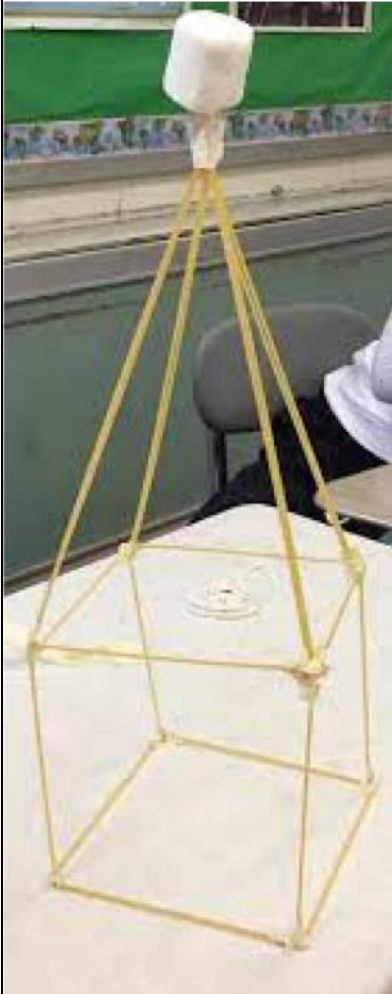
- 20 sticks of dry spaghetti
- String
- Tape
- 1 jumbo marshmallow (*or something similar*)
- Timer (*optional*)

TASK:

Build a tower of spaghetti that will hold a jumbo marshmallow. Make the tallest tower possible from the materials supplied. The marshmallow must be able to sit on top without falling off.

OPTIONAL TIME CONSTRAINT: *Try to complete this task in 20 minutes (you may want to use a stopwatch/timer).*

Sketch your design ideas. Describe the structure and strength, record the height of your tower, what worked/didn't work and if you used the optional time constraint.



Appendix 1 – PE: Exercise Ideas - Friday

HAPPY BABY



Lie on your back and hug your knees into your chest. Grab the outer part of your feet with both hands and rock like a happy baby.

STANDING FORWARD BEND



From Mountain Pose, bend your upper body and reach for your toes. Sway your arms gently.

EAGLE



Wrap one leg around the other and bend your knees slightly. Bring your bent arms out in front of you and wrap them together in opposite directions.

BUTTERFLY



From a sitting position, bend your legs together so that the soles of your feet touch together. Place your hands at your heart. Gently flutter your legs.

DOWNWARD FACING DOG



Starting on your hands and knees, press your hands into the ground and straighten your legs as you lift your hips into the air. Relax your head and neck.

DANCING SHIVA



Raise your arms up to your sides, bending them at the elbow. In the air, cross one leg over the other and bend at the knee like you are sitting in a chair.

EXTENDED MOUNTAIN



Stand tall and reach your arms up to the sky meeting your palms together above your head.

UPWARD FACING DOG



Lie on your tummy and press your outstretched legs into the ground. Place your palms flat under your shoulders and draw your shoulder blades together.

WARRIOR THREE



Stand on one leg and extend your other leg behind you. Bend your torso forward and reach both arms out in front of you.

TREE



Standing on one leg, bend the opposite knee and place the sole of your foot on your inner ankle or thigh (never on your knee).

TABLE TOP



Rest comfortably on your hands and knees, with your arms under your shoulders and your knees under your hips. Your back and neck should be in a straight neutral position.

FLOWER



From a sitting position, lift up your legs and weave your arms under your legs so that the soles of your feet touch together.

CHILD'S POSE



From a kneeling position, sit back on your heels and gently drop your forehead down to rest.

SUN SALUTATION



Stand tall. Bring your arms up over your head and place your palms together. Bring your palms down to the center of your chest.



15-minute bodyweight workout

When you're short on time or don't have access to any equipment, try this easy-to-follow 15-minute bodyweight workout



Instructions	Warm up by jogging on the spot for 3 minutes.	Perform each of the 5 exercises below. Complete as many reps as you can in 40 seconds, then rest for 20 seconds before moving on to the next exercise.	Repeat the circuit twice.	Cool down by stretching for 2 minutes.
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Although these exercises are designed to challenge your body, you shouldn't feel pain when performing them. If you do feel pain, talk to your doctor or physiotherapist. They will make sure you're doing them correctly or may suggest a different exercise.

Top 10 Cardiovascular Endurance Exercises

CRISSCROSS JUMPS	FROG JUMPS
SUPERBALL BOUNCE	BOXER BOUNCES
RUN IN PLACE	JUMP ROPE
High Knee March	MOUNTAIN CLIMBERS
Scissor Steps	JUMPING JACKS

Appendix 2 – PE: Wk9 Reflection form - Friday

1. How would you rate the intensity of your exercise from 1 -10 (1 being the least intense and 10 being the most intense)?
2. Which part of your body did your main exercise workout the most? (upper body, core or lower body)
3. Compared to week 7, were you more, or less active? Why?

Chinese CLOTE Program Activity

Week 9 Program Activity

Chinese CLOTE

Learning Intention:
(We are learning about...)

-Chinese sentences
structure.

Success Criteria:(We can...)

-Make sentences in correct
structure.

Topic- Sports and Hobbies

Activities

一) Look at the following sentences.

(*Please check with your parents before you click on this link.)

1) Say that you like something, Use “I +like+ something.”

For example: 我喜欢运动。(Wǒ xǐhuān yùndòng.) I like sports.

2) Talk about that you prefer to do something, use “I + prefer + do + something”

For example: 我比较喜欢打乒乓球。(Wǒ bǐjiào xǐhuān dǎ pīngpāng qiú.) I prefer to play table tennis.

3) Talk about something that you don't like, use “ I + not + like + something”

For example: 我不喜欢拳击 (Boxing)。(Wǒ bù xǐhuān quánjī.) I don't like boxing.

二) Use the phrases below to make sentences. You can use online translation app to support you to

find

the Chinese characters when you make the sentences.

(*Please check with your parents before you use the online translation app)

喜欢 比较喜欢 (bǐjiào xǐhuān) 不喜欢 (bù xǐhuān)

1. 喜欢: _____

2. 比较喜欢: _____

3. 不喜欢: _____

Korean CLOTE Program Activity

**Week 9
Program
Activity**

**Korean
CLOTE**

Learning Intention
We are learning about diverse language structures and expressions.

Success Criteria
I can:
Understand the meanings of key words or phrases in the text.

Read with expressions and pauses.

Topic: The Giving Tree-1 (아낌없이 주는 나무-1)

Read out the passage below three times. **(Mark-only the sentences in red)**

You can refer to the meanings of the new words in the spelling list below.

다음 글은 쉘 실버스타인의 아낌없이 주는 나무입니다.
 옛날에 한 그루의 나무가 있었습니다. 그리고 그 나무에게는 귀여운 한 작은 소년이 있었습니다. 그 소년은 매일같이 그 나무에게로 왔습니다. 소년은 바람에 날리는 나뭇잎을 열심히 주워 모아 왕관을 만들어 쓴 채 숲 속의 왕 놀이를 즐겼고 나뭇가지를 타고 그네를 타기도 했습니다. 열매를 따먹기도 하고 숨바꼭질도 하고 나무 그늘 아래서 낮잠도 잤습니다. 그렇게 나무와 소년은 사랑하며 행복하게 지냈습니다. 그러나 세월은 자꾸 흘러 소년도 나이가 들었습니다. 소년이 나무를 찾는 시간이 줄어들고 나무는 때때로 고독하기도 했습니다. 나이가 들면서 나무와 노는 것보다 돈이 필요했던 소년에게 나무는 사과 열매를 주었습니다. 소년은 열매를 따 가지고 멀리 떠났지만 그래도 나무는 행복했습니다. 오랜만에 돌아온 소년은 옛날처럼 놀고 싶은 나무에게 보금자리가 필요하다고 요구했습니다. 나무는 자기의 가지를 베어가라고 했습니다. 소년은 나뭇가지를 베어갔지만 그래도 나무는 행복했습니다. 오랜 세월이 흘러 소년이 늙어 돌아왔을 때 나무는 아무것도 줄 것이 없다고 하자 소년이 말했습니다. "나한테 필요한 것은 쉘 곳이야 나무는 베어진 자신의 밑둥에 앉으라고 했습니다. 노인이 된 소년은 그 위에 걸터앉았습니다 나무는 그저 행복했습니다. 나무는 자신의 모든 것을 아낌없이 주었습니다. 그러면서도 마냥 행복했습니다. 사랑은 무엇입니까? 소년을 위해 모든 것을 내어주고도 행복해하는 나무의 모습에서 우리는 사랑의 참 뜻을 깨닫게 됩니다."

Spelling- 소년- boy	아낌없이-generously	왕관- clown	숲-forest
그늘- shadow	그네- swing	열매- fruit of a tree	숨바꼭질- hide and seek
낮잠- nap	세월- time	줄어들다- decrease/lessen	
때때로- sometimes	고독하다- be lonely	필요하다- need	보금자리-nest

가지를 베다-cut the branch

요구하다- demand

밑둥- stump

걸터앉다- sit around the edge

그저-just

마냥-ininitely/so much

자신-self

모습-figure

참 뜻- real meaning

깨닫게 되다- come to realise

Activity 1: Read out the passage to your parent.

Activity 2: Spelling activities as below

1. **Look, Cover, Write, Check: Choose 7 words** and **write** them three times in your workbook. **(4 words for Mark)**
2. **Choose 6 words (3 words for Mark)** from the spelling list and write a sentence with the word in it. Make sure the sentence makes sense AND it shows you understand the meaning.

Alternatively, Mark can write the sentences below twice and write the English translation of the sentences.

우리는 나무 **그늘** 아래에 앉아 쉬었다.

세월이 많이 흘렀다.

나는 연필이 **필요합니다**.