Home Learning Pack

Week 9 – Spring Week

Term 3, 2021
Stage 3

Barramurra
Public School

HOME
LEARNING

Stage 3 Home Learning Grid - Term 3 Week 9

Activities can be completed digitally on the Seesaw app or as a hard copy and uploaded as an image to Seesaw

	Monday	Tuesday	Wednesday	Thursday	Friday
Good Morning + Warmups	Answer the question given by your teacher on Seesaw and say good morning! Word of the Day Complete the word of the day on Seesaw/Hard Copy and submit when complete				
Reading Log	Read for 20 minutes – PM e-collection, Reading Eggs or a book of your choice. Fill in your reading log, save as a draft and submit it on Friday.				
Literacy	Science Literacy Seesaw activity: Air resistance – it's a drag!	Spring Grammar Seesaw activity: Similes and metaphors	Spring Comprehension Seesaw activity: Read the text "Spring in Australia' then answer the questions	Spring Poetry Seesaw activity: Spring sensory poem	Spring Literacy Free choice: Spring home learning matrix, find a word and mindfulness colouring
Physical Activity	Outdoor Physical Activity and Play You could post a picture or video of yourself getting out and getting active				
Literacy	Grammar Seesaw activity: practice/practise	Science Literacy Seesaw activity: Understanding gravitational force – part 1	Grammar Seesaw activity: to/too/two	Science Literacy Seesaw activity: Understanding gravitational force – part 2	Writing Seesaw activity: Weekly reflection
Mathematics	Maths Seesaw activity: Addition and subtraction lesson 1. Log onto Prodigy and complete 30 minutes of activities	Maths Seesaw activity: Addition and subtraction lesson 2. Log onto Prodigy and complete 30 minutes of activities	Maths Seesaw activity: Addition and subtraction lesson 3. Log onto Prodigy and complete 30 minutes of activities	Maths Seesaw activity: Addition and subtraction lesson 4. Log onto Prodigy and complete 30 minutes of activities	Maths Seesaw activity: Addition and subtraction lesson 5. Log onto Prodigy and complete 30 minutes of activities
Other Key Learning Areas	Science & Technology: Seesaw activity: Tension and elastic spring forces	Geography: Seesaw activity: Living in Asia	Personal Development and Health: Seesaw activity: Mindfulness - Find Your Yeti Body	Creative Arts: Seesaw activity: Monochromatic Portraits Learn about Van Gogh and some of his monochromatic artworks	Free Choice Afternoon Complete any activity that interests you and upload a photo or video to Seesaw with an explanation on what you did and why you like to do this activity
Additional Optional Activities	PM e-collection/Reading Eggs (Online English) Log on to PM e-collection or Reading Eggs and explore. PM e-collection online Reading Eggs		Mathematics Youcubed nrich Maths OR Number of the day Maths Starters	Outdoor Physical Activity and Play Post a picture or video of yourself being active. DET - Learning from Home Resources https://education.nsw.gov.au/teaching-and-learning/learning-from-home/learning-at-home	

Barramurra Public School

Reading Log – Week 9

Find a relaxing space in your house where you can read. Read a book, magazine or a book from the PM e-collection in your chosen space. Add the book you have read, a rating and a picture of where you read to your reading log. Be creative!

Reading Log – Week 9

	Monday	Tuesday	Wednesday	Thursday	Friday
Book Title and Author	Title: Author:	Title: Author:	Title: Author:	Title: Author:	Title: Author:
Rating – give what you read a rating out of 5, where 1 is not very good and 5 is great!	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆
Where I read	Where: Photo:	Where: Photo:	Where: Photo:	Where: Photo:	Where: Photo:

Word of the Day – Week 9

	Monday	**Tuesday**	**Wednesday**
Word	undulation	monstrosity	prototype
Definition	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____
In a sentence	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____
Synonym	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
Antonym	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
Word Origin	_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____
Words in word	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____

Word of the Day – Week 9

	Thursday	**Friday**
Word	malicious	deficiency
Definition	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____
In a sentence	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____
Synonym	_____ _____ _____ _____	_____ _____ _____ _____
Antonym	_____ _____ _____ _____	_____ _____ _____ _____
Word Origin	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____
Words in word	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____

Monday

Activities

be
POSITIVE
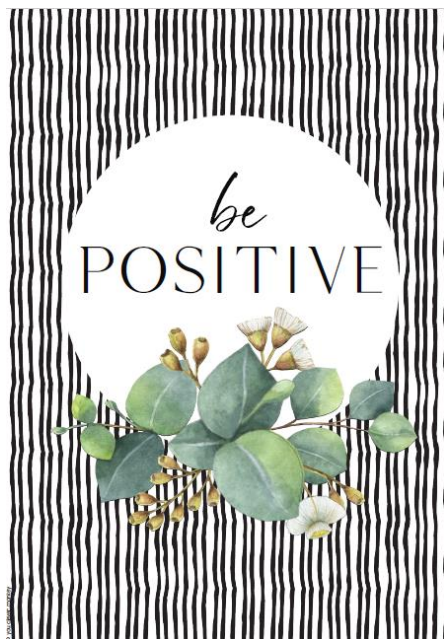
Monday - Science Literacy

Week 9: Monday lesson
Air resistance - it's a drag!

LEARNING INTENTION:

I understand that air resistance opposes motion and can be deliberately increased or decreased.

Find and record the definition of the following terms:

Vocabulary	Definition
aerodynamics	
air resistance	
drag	
friction	
inference	

Here is an image of a space capsule returning to Earth with three astronauts inside.

Monday – Science Literacy

YOUR TASK:

Why do you think the outside of the capsule has an orange glow?

Access Inquisitive videos here or in the instructions

Link: http://inq.co/class/9H3E5   4 digit code: 6035

(▶) Watch the video of a famous experiment performed on the Moon during the Apollo 15 mission in 1971.

(▶) Now watch the video of a similar version of the experiment (using a bowling ball instead of a hammer) being performed in a special building on Earth.

In the second video, the experiment is done twice. How did the scientists change things to produce the results of the second experiment?

An inference is a conclusion you can make based on your evidence and your reasoning.

Use the results of the second experiment and what you observed in the first video to make an inference about the Moon.

YOUR TASK:

Read the Air Resistance eBook.

Complete the graphic organiser

· 3 situations where air resistance is a problem

· 2 ways air resistance can be reduced

· 1 person who wants to increase their air resistance.

Level 1

Level 2

Level 3
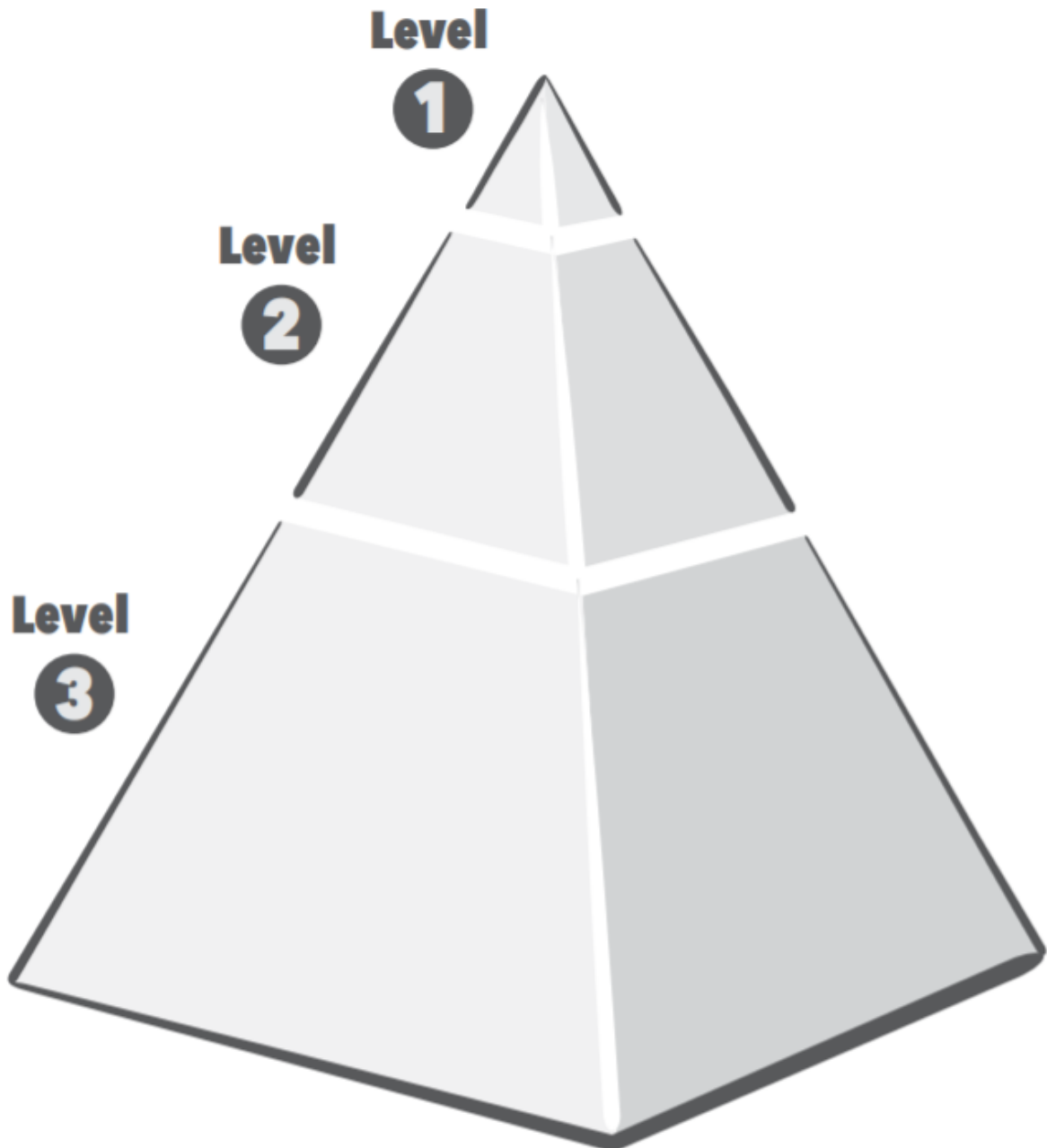
Monday - Science Literacy

YOUR TASK: Compare the Pair

Look at the pictures of the 2 cyclists. One of these cyclists will experience far less air resistance than the other.

For each photo, circle different parts of the cyclist or the bike that either increases or decreases air resistance. Write a brief description next to the picture of these parts.

(Reread the eBook for some hints).

Description of cyclist # 1:

Monday – Science Literacy

Description of cyclist # 2:

YOUR TASK:

Look at this image of a tandem (2 person) skydive.
The small white object is not the main parachute,
but a 'drogue' chute. All tandem skydivers must use one.

Why do you think a drogue chute is necessary for a
tandem skydive?

Monday – Science Literacy

Do some research to find out the purpose of the drogue chute.

After doing some research, why do you think a drogue chute is necessary for a tandem skydive?

YOUR TASK:

Vehicles like rockets and fast trains have a pointy 'nose' on the end to decrease air resistance.
Cars are usually smooth and quite aerodynamic, but they don't have pointy bonnets.

ANSWER THE FOLLOWING QUESTIONS:

Suggest some reasons as to why cars don't have pointy bonnets.

How might having a car with a good aerodynamic shape save you money?

Come up with <u>3 or more</u> creative added features for a car to decrease air resistance.

Monday - Science Literacy

<u>Draw a model of your car design</u> including the added features you came up with

Were you successful today?

Tick the boxes to show whether you have been successful today:

☐ I can define the terms: aerodynamics, air resistance, drag, friction and inference

☐ I know 3 situations where air resistance is a problem

☐ I can name at least 2 ways to reduce air resistance

☐ I know why a drogue chute is necessary for tandem skydivers

EXTENSION ACTIVITY: Optional – Activity: Parachute design

Follow the steps below to observe how the shape and size of a parachute affects how an object falls to the ground.

Experiment

Aim

To find out how the shape and size of a parachute affects the time it takes to land.

Materials

Collect the materials listed on page 2.

Procedure

1. Make a simple parachute for your figure by taping four equal lengths of string to each corner of the serviette. Tie or tape the ends of the string to the figure.

2. Drop your parachute from a safe height at least 4m above the ground. Time how long it takes to land. Repeat twice and record your results in the table below.

3. Use the plastic bags and any other materials to create a parachute that will drop more slowly and land more gently. Attach your figure.

4. Complete the 'Hypothesis' section below and show your teacher. Drop your new parachute from the same height as before. Record the time taken to land. Repeat twice and record your results.

You will need:
- small block or figure (the 'payload')
- paper serviette, opened out into a square
- string
- sticky tape
- different types of plastic bags (e.g. garbags, freezer bags)
- scissors
- stopwatch.

Monday – Science Literacy

EXTENSION ACTIVITY: Optional – Activity: Parachute design

Complete the following:

Hypothesis:

I predict that

because

Results:

	Time 1	Time 2	Time 3
Parachute 1			
Parachute 2			

Conclusion:

Did your second parachute drop more slowly?   YES / NO

What do you think was the reason for this?

Was your hypothesis correct?YES / NO

There is often confusion about which homonym to use. Even many adults get confused when they have to write the word. But the rule is very simple!

Prac*tice* is a noun - a *thing*. You can remember it because it is spelt with *ice,* and ice is a noun. Practice is a thing you can go to, or a cultural norm.

E.g. *You can go to soccer practice after school.*

It is the common practice to remove your shoes before entering a house in Japan.

These are *things* that you can go to, or that a culture believe in.

Prac*tise* is a verb – an action, or something you can do.

E.g. *Can I practise scoring goals at the park?*

Let's go the court and practise netball.

These are activities you can *do*.

Choose the right homonym for each sentence. Consider if it is a noun (thing) and therefore prac*tice*, or a verb (action) and therefore prac*tise*. Some are very tricky!

We have netball practice/practise at lunch.

Want to practice/practise shooting goals?

We were told to practice/practise our speeches.

It is the local practice/practise to wear short in summer.

When I feel sick I go to the doctor's practice/practise.

Monday - Grammar

When I feel sick I go to the doctor's practice/practise.

To improve you should practice/practise more.

I practice/practise the piano every day.

Deep in the jungle is a tribe who practice/practise cannibalism.

Witches practice/practise sorcery.

When training, medieval soldiers used practice/practise swords.

Many religions practice/practise fasting.

The bottles were used as target practice/practise.

He really wished he practiced/practised more often.

She was grounded, so she couldn't go to football practice/practise.

Brushing your teeth twice a day is a healthy practice/practise.

Mathematics Week 9
Addition & Subtraction
~Mental Addition Strategies~

Learning Intention
- To be able to efficiently use a number of mental strategies to solve addition problems & equations.

Success Criteria
- I understand a variety of mental addition strategies and can decide which mental strategy to use to solve a specific problem.

Revision

❖ For revision I want you to start at 7 and add 11 each time for 6 terms... I will do the first for you.

7, 18, _____, _____, _____, _____, _____

Addition – Mental Strategies

❖ It is very important to be able to efficiently add & subtract in our heads, not just to use in Mathematics lessons, but in our everyday life.

❖ It is also just as important to know a variety of strategies or methods for mental addition as certain problems work better with certain strategies.

❖ The main strategies we use are the *Jump, Split, Compensation & Bump* strategies. We will now look at each strategy for addition. While these are mental strategies it is important to be able to write down the working that is happening in your head.

Mental Strategies – Jump Strategy

❖ While the jump strategy is a very visual strategy we generally do it in our heads and we do it in two steps that done to make it easier for us to add (or subtract).

When we add we can use the jump strategy to help us. Look at 257 + 32:

1 First we jump up by the tens
2 Then we jump up by the units

+ 10   + 10   + 10   + 2

257   267   277   287 288 289

257 + 32 = 289
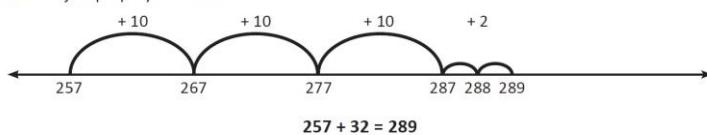
❖ We can also use this strategy when adding decimals as well, we just add a step for every place value.

The jump strategy is also useful when adding decimals. Look at how we do this with 38.6 + 2.6:

1 First we jump up by the whole numbers.
2 Then we jump up by the tenths.
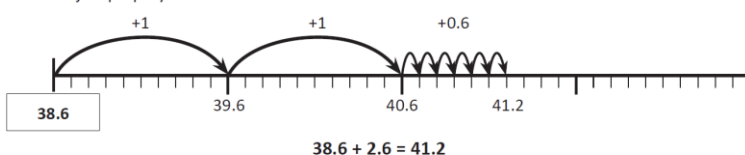
+1   +1   +0.6

38.6   39.6   40.6   41.2

38.6 + 2.6 = 41.2

Mental Strategies – Jump Strategy

❖ Now it is your turn to try. You will need to draw a blank number line for this.
Complete these 3 questions using the Jump Strategy. You need to show your working.

a) 575 + 52 =

b) 1305 + 75 =

c) 84.3 + 2.9 =

Mental Strategies – Split Strategy

❖ The next strategy we can use is the Split Strategy. This can be used when adding larger numbers and involves splitting up the terms into each place value and adding on… it can be done two ways as well.

$$214 + 138 \begin{cases} 100 \\ 30 \\ 8 \end{cases} \rightarrow 214 + 100 = 314 \rightarrow 314 + 30 = 344 \rightarrow 344 + 8 = 352$$

214 + 138 = 352

OR

214 + 138 = 200 + 100 = 300

10 + 30   =   40

4 + 8   =   12

= 352

Mental Strategies – Split Strategy

❖ We can also use the Split Strategy when adding decimals.

Sometimes it is easier to split both numbers. Look at how we do this with 21.2 + 3.8

1 We split the numbers into whole numbers and decimals.

2 We then rearrange the problem, adding the whole numbers and decimals separately.

3 We add the 2 answers.

$$21.2 + 3.8 = (21 + 3) + (0.2 + 0.8)$$
$$= 24 + 1$$
$$= 25$$

Mental Strategies – Split Strategy

❖ Now it is your turn to try. Complete these 3 questions using the Split Strategy. You need to show your working.

a) 575 + 152 =

b) 1305 + 1475 =

c) 84.3 + 12.9 =

Mental Strategies – Compensation Strategy

❖ The next strategy we can use is the Compensation Strategy. This strategy involves rounding up or down to a number that is easier to calculate mentally – usually a multiple of 5 or 10. It is very important to remember how much we rounded as we need to reverse this at the end otherwise the equation will be unequal and is actually a different number sentence.

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

405 + 69   =   474

405 + 70 (− 1)   *I rounded up by 1*

475 (− 1)   = 474   *so I subtract 1.*

> I added 1 extra to round to 70 so I have to take 1 off my answer.

THINK

235 + 68   =   303

235 + 70 (− 2)   *We rounded up by 2, which means we added 2*

305 (− 2)   = 303   *too many so we subtract 2.*

325 + 41   =   366

325 + 40 (+ 1)   *We rounded down by 1, which means we subtracted*

365 (+ 1)   =   366   *1 too few, so we add 1 back.*

Mental Strategies – Compensation Strategy

❖ We can also use the Compensation Strategy when adding decimals.

Follow these steps for the compensation strategy when adding decimals:

1 Round the number closest to a whole number.

2 Compensate for rounding:

$31.4 + 5.8$ ➜ $31.4 + 6$ *I rounded up by 0.2, which means I*
    $= 37.4 - 0.2$ *added extra so I*
    $= 37.2$ *need to subtract 0.2*

$51.4 + 8.3$ ➜ $51.4 + 8$ *I rounded down by 0.3, which means I did not*
    $= 59.4 + 0.3$ *add enough so I need*
    $= 59.7$ *to add 0.3*

Mental Strategies – Compensation Strategy

❖ Now it is your turn to try. Complete these 3 questions again but this time using the Compensation Strategy. You need to show your working.

a) 575 + 52 =

b) 1305 + 75 =

c) 84.3 + 2.9 =

Mental Strategies – Applying Strategies

❖ Now it is your turn to apply your own mental

Show 2 different ways of solving this problem. You may use the strategies covered in the previous topic or explain strategies of your own:
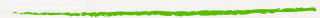
249 + 142

Reflection

○ I understand a variety of mental addition strategies and can decide which mental strategy to use to solve a specific problem.

○ What is one new thing you learnt today in Mathematics?

_____

_____

_____

It's Prodigy Time
Remember to log into your class Prodigy account and enjoy up to 30mins of Prodigy Time!

Click on the link below:

STEM Exploration
~Tension & Elastic Spring Forces~

Learning Intension
- To be able to describe and differentiate between Tension & the Elastic Spring forces.
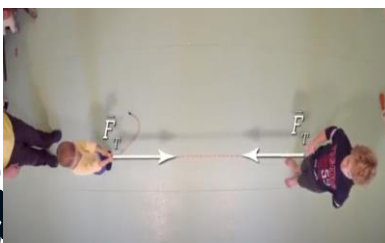- To explore the Spring Force through experimentation.

Success Criteria
- I can describe the Tension & the Elastic Spring forces and understand their difference.
- I have developed a first hand understanding of the Spring Force through experimentation.

What is Tension?

Tension is a reaction force applied by a stretched string (rope or a similar object) on the objects which stretch it. The direction of the force of tension is **parallel** to the string, towards the string.

Tension exists also inside the string itself: if the string is made up of two parts, tension is the force which the two parts of the string apply on each other. The amount of tension in the string determines whether it will break, as well as its vibrational properties, which are used in musical instruments.
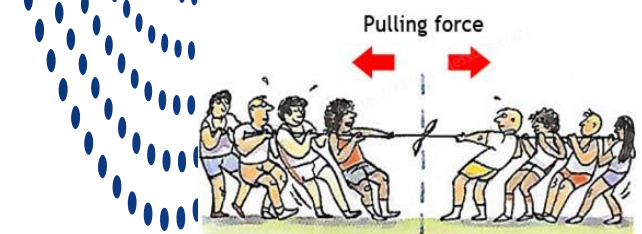
Video Link – Google Drive
https://drive.google.com/file/d/1RIT8Z2yYUoP fDDVrnz0mfp5VoG9RZ4OB/view?usp=sharing
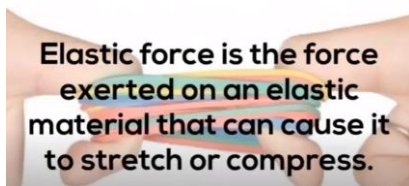
Video Link – YouTube
https://youtu.be/iWgbhbwwbPk

Pulling force

What is the Elastic Spring Force?

- Something that is **elastic** can be <u>stretched or deformed (changed) and returned to its original form</u>, like a rubber band. It tries to come back to its first shape. The stress is the force applied; the strain is how much the shape is changed.
- The **spring force** is <u>the force exerted by a compressed or stretched spring upon any object that is attached to it</u>. An object that compresses or stretches a spring is always acted upon by a force that restores the object to its rest or equilibrium position. For most springs (specifically, for those that are said to obey "**Hooke's Law**"), the magnitude of the force is directly proportional to the amount of stretch or compression of the spring.

Video Link – Google Drive
https://drive.google.com/file/d/14KvC5z2Xl4eVYvRAW77UANQrg-1i0U3V/view?usp=sharing

Video Link – YouTube
https://youtu.be/JhmuS9MYVjY

Experimenting with the Elastic Spring Force?

- In this experiment we are going to develop a hands-on understanding of the elastic spring force and tension.
- In the next few slides we will create and test an experiment to test the Elastic Spring force.
- Details can also be found at this link below.

https://buggyandbuddy.com/stem-activity-for-kids-popsicle-stick-catapults/

- **Remember as the Mythbusters say -**
"The difference between mucking around and Science is writing down your results" - **So make sure you record your findings.**

Experimenting with the Elastic Spring Force?

Materials

- 6-12 Paddle Pop / Popsicle Sticks
- 6-10 Rubber bands
- 1 Small plastic / reusable spoon
- 1 small pom pom or light weight object
- Optional: Paint

Method

1. Make a stack of paddle pop sticks with at least 4 sticks and rubber band them together on each end.

2. Take two paddle pop sticks and stack them together. Rubber band them together on just one end.

3. Pull the two paddle pop sticks slightly apart and place the larger stack of paddle pop sticks in between them.

4. Rubber band the stack of paddle pop sticks to just the top paddle pop stick.

5. Rubber band the spoon to the upper paddle pop stick.

6. Place the pom pom or small object onto the spoon.

7. Hold the catapult with one hand, and use the other hand to pull the spoon down. Release the spoon to launch.

Add a photo or drawing of your first design.

Make sure you label your design.

Experimenting with the Elastic Spring Force?

<u>Testing</u>

- You will need to test the catapult 3-5 times, measuring and recording the distance the pom pom travelled each time.

- Measure the distance from the catapult to the pom pom with a ruler.

- Record each distance in the table on the results slide. Find the average if you can.

- **<u>Next</u>** you need to modify your catapult in some way. This may be by adding or taking away paddle pop sticks from your stack, by adding more rubber bands or any other way you can think of.

- Then you need test the catapult 3-5 times again, measuring and recording the distance the pom pom travelled each time once again.

- **<u>Finally</u>** you need to make a conclusion or observation to what was the difference if there was one between the two designs and why you think that it occurred.

<u>Add a photo or drawing of your modified design.</u>

<u>Make sure you label your design.</u>

Experimenting with the Elastic Spring Force?

Results

- Original Design   Average = _____

Test 1	Test 2	Test 3	Test 4	Test 5

- Modified Design   Average =

Test 1	Test 2	Test 3	Test 4	Test 5

Experimenting with the Elastic Spring Force?

Conclusion / Observations

- Write a statement regarding what was the difference if there was one between the two designs and why you think that it occurred.

_____
_____
_____
_____
_____

Reflection

Did you enjoy this STEM Exploration? Why?

What challenges did you have?

How did you overcome challenges?

Tuesday

Activities

be
HAPPY

Tuesday - Grammar

Similes and Metaphors

Learning Intentions

✓ I can use similes in my writing to compare something to something else using 'like' and 'as'
✓ I can use metaphors in my writing to describe something as being something else using 'is', 'was', 'are' or 'were'

When you are describing something in your writing, you are trying to create a picture in the reader's mind. Similes and metaphors can help you to do this really effectively.

Let's use similes and metaphors to create vivid descriptions about Spring.

A **simile** is a way of describing something by comparing it to something else using 'like' or 'as'. For example:

The Spring flowers burst from the ground **like** fireworks.

The hum of the bees was **as** loud **as** a church choir.

A **metaphor** is a figure of speech where something is described as actually being something else entirely. Usually, the two things in the description are very different. The idea is that by making an unusual comparison, an interesting and effective description is created. For example:

The blue Spring sky **was** an empty canvas.

The lambs **were** soft white pillows in the fresh green grass.

Tuesday - Grammar

Use the words in the box below to inspire you as you write 5 similes and 5 metaphors about Spring.

wildflower	honey	cleaning	yellow	sprout	sunshine
chick	bud	busy	bright	birds	garden
cocoon	warm	outside	fragrance	playing	singing
butterfly	happy	green	blossom	bloom	bees

SPRING SIMILES

Write 5 similes and record the word chosen from the list.

Word chosen	Simile

Tuesday - Grammar

SPRING METAPHORS

Write 5 metaphors and record the word chosen from the list.

Word chosen	Simile

Were you successful today?

☐ I can use similes in my writing to compare something to something else using 'like' and 'as'

☐ I can use metaphors in my writing to describe something as being something else using 'is', 'was', 'are' or 'were'

Science Literacy
Understanding the Gravitational, Normal & Applied Forces. Part 1

Learning Intention

To develop a sound understanding of the normal, applied and gravitational forces and how they relate to the general understanding of the physical world.

What is Gravity?

Gravity is the force that <u>pulls objects towards the Earth</u>. It's the reason we walk on the ground rather than float around.

Gravity also holds Earth and the other planets in their orbits around the Sun.

Gravity exists <u>everywhere in the universe</u>, however, the gravitational force is not always the same.

Video Link – YouTube
https://youtu.be/suQDwZcnJdg

Video Link – Google Drive
https://drive.google.com/file/d/1A1TZ0cDA6pGcm80CV1nnRTImPmeIc47u/view?usp=sharing
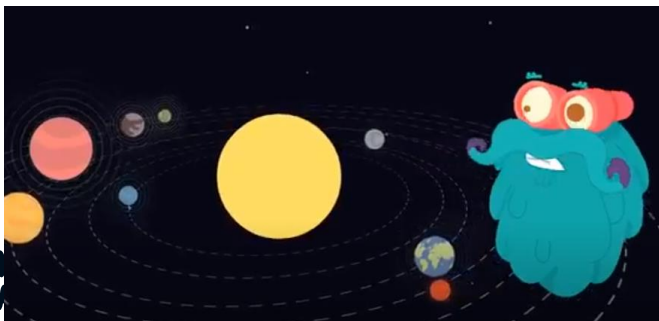
What is Gravity?

- Your task is to watch the video and write down **3 main idea points** (main facts) that are mentioned and then **for each add a detail** to enhance the main idea.

==(main idea)==   <mark>(detail to add)</mark>

e.g. ==Dogs are a very popular pet for people to own.== <mark>Dogs come in many different breeds, the most popular dog breed in Australia in 2021 is the Cavoodle according to *PetCulture*.</mark>

What is Gravity?

1. _____

   _____

   _____

   _____

   _____

   _____

2. _____

   _____

   _____

   _____

   _____

   _____

3. _____

   _____

   _____

   _____

What is Gravity? Galileo

- A number of famous scientists have made discoveries about gravity. Most namely Galileo, Sir Isaac Newton and Albert Einstein.
- Galileo's most famous observation was that <u>two objects of the same size but different weights hit the ground at the same time if they are dropped from the same height</u>. This happens because the force of gravity acting on both objects is the same.
- If a feather and a ball are dropped from the same height (on Earth) they fall at different rates. This is because the feather has more air resistance acting on it. Air pressure acts on the feather from all directions counteracting the force of gravity.
- Galileo dropped two balls of different weights but the same size off the Leaning Tower of Pisa, proving that the weight of an object doesn't affect how fast it falls. This experiment took place over 430 years ago. Wow! Try this experiment standing on a chair, step stool or ladder and then drop the balls to see what happens for yourself. Try various other items to see what happens when you drop: 2 egg cartons, 2 empty applesauce containers, 2 empty soda bottles, etc.
- However if a ball and feather are dropped in a vacuum, where there is no air resistance as there's no air, the ball and feather will hit the ground at the same rate. The Moon is the perfect place for this experiment and has been done by an Apollo 15 astronaut.

What is Gravity? Galileo Continued

- The link to find this information is: https://moon.nasa.gov/resources/331/the-apollo-15-hammer-feather-drop

Bottle Drop Experiment – Try this for yourself.

- Following on from the ball and feather experiment another great example of Galileo's discovery is to half fill one plastic bottle and leave another (the same size) empty. If dropped from the same height they will hit the ground at the same time! So much fun and you can repeat the experiment as many times as you would like. <u>But please do the experiment outside in case some water is spills out of the bottle.</u>

- **Write a explanatory paragraph about your observations of the experiment and why you think it happened.**

_____

_____

_____

_____

_____

_____

_____

_____

What is Gravity? Sir Isaac Newton

- According to legend, Isaac Newton was sitting under an apple tree when an apple fell on his head, which made him wonder why if fell to the ground.
- Sir Isaac Newton published the Theory of Universal Gravitation in the 1680s, setting out the idea that gravity was a force acting on all matter. His theory of gravity and laws of motion are some of the most important discoveries in science and have shaped modern physics.

What is Gravity? Sir Isaac Newton Continued

- Your task is to use the information on the previous slide **AND** in the video link below and to write a summary (1-2 paragraphs) of how Sir Isaac Newton's discoveries changed the way Scientists understood gravity and physics.

Video Link YouTube
https://youtu.be/xmJoPCZj1_Q

Video Link Google Drive
https://drive.google.com/file/d/1BBq7qFGXDoiOar31uWmy-7zMisotVb5H/view?usp=sharing

What is Gravity? Sir Isaac Newton Task

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Mathematics Week 9
Addition & Subtraction
~Mental Subtraction
Strategies~

Learning Intention
- To be able to efficiently use a number of mental strategies to solve subtraction problems & equations.

Success Criteria
- I understand a variety of mental subtraction strategies and can decide which mental strategy to use to solve a specific problem.

Revision

❖ For revision I want you to start at 107 and subtract 6 each time for 6 terms... I will do the first for you.

107, 101, _____, _____, _____, _____, _____

Subtraction – Mental Strategies

❖ It is very important to be able to efficiently add & subtract in our heads, not just to use in Mathematics lessons, but in our everyday life.

❖ It is also just as important to know a variety of strategies or methods for mental subtraction as certain problems work better with certain strategies.

❖ The main strategies we use are the *Jump, Split, Compensation & Bump* strategies. We will now look at each strategy for subtraction. While these are mental strategies it is important to be able to write down the working that is happening in your head.

Mental Strategies – Jump Strategy

❖ While the jump strategy is a very visual strategy we generally do it in our heads and we do it in two steps that done to make it easier for us to subtract (or add). The difference this time is we start at the right hand side instead of the left.

❖ Just like in addition, we can also use the Jump Strategy when subtracting decimals.

When we subtract we can use the jump strategy to help us. Look at $189 - 35$:

1 First we jump back by the tens.
2 Then we jump back by the units.
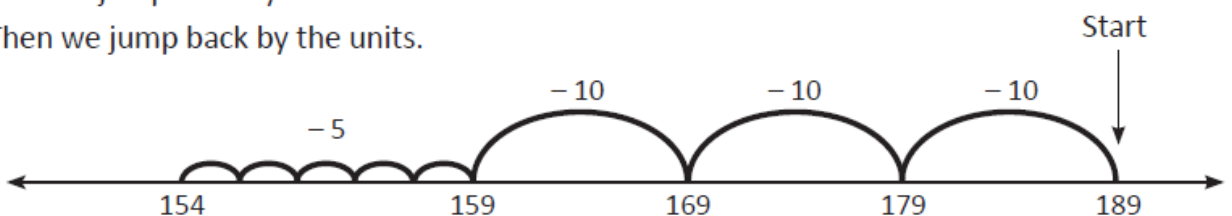
$$189 - 35 = 154$$

Mental Strategies – Jump Strategy

❖ Now it is your turn to try. You will need to draw a blank number line for this and start on the right hand side. Complete these 3 questions using the Jump Strategy. You need to show your working.

a) 575 - 52 =

b) 1305 - 75 =

c) 84.3 - 2.9 =

Mental Strategies – Split Strategy

❖ The next strategy we can use is the Split Strategy. This can be used when subtracting larger numbers and involves splitting up the terms into each place value and subtracting on… it can be done two ways as well.

When subtracting large numbers in our heads it can be easier to split the number to be subtracted into parts and work with each part separately.

$$468 - 215 \begin{cases} 200 \\ 10 \\ 5 \end{cases} \rightarrow 468 - 200 = 268 \rightarrow 268 - 10 = 258 \rightarrow 258 - 5 = 253$$

$$468 - 215 = 253$$

OR

468 − 215 = 400 - 200 = 200

60 - 10   =   50

8 - 5 =   3

= 253

Mental Strategies – Split Strategy

❖ **We can also use the Split Strategy when subtracting decimals.**

We can use the same process to subtract decimals:

1 We split the numbers into whole numbers and decimals.

2 We then rearrange the problem, subtracting the whole numbers and decimals separately.

3 We add the 2 answers.

$$31.4 - 2.3 = (31 - 2) + (0.4 - 0.3)$$
$$= 29 + 0.1$$
$$= 29.1$$

Mental Strategies – Split Strategy

❖ **Now it is your turn to try. Complete these 3 questions using the Split Strategy. You need to show your working.**

a) 575 - 152 =

b) 1475 - 1305 =

c) 84.9 - 12.3 =

Mental Strategies – Compensation Strategy

❖ The next strategy we can use is the Compensation Strategy. This strategy involves rounding up or down to a number that is easier to calculate mentally – usually a multiple of 5 or 10. It is very important to remember how much we rounded as we need to reverse this at the end otherwise the equation will be unequal and is actually a different number sentence.

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

486 − 59 = 427

486 − 60 (+ 1)   *I rounded up by 1, which means I subtracted*

426 (+ 1)   = 427   *1 extra so we need to add 1 back.*

> I took off 1 extra so I have to add 1 back.

THINK

---

270 − 59 = 211

270 − 60 (+ 1)   *We rounded up by 1 which means we subtracted 1 extra,*

210 (+ 1) = 211   *so we need to pay it back.*

350 + 73 = 423

350 + 70 (+ 3)   *We rounded down by 3 which means we need*

420 (+ 3) = 423   *to add 3 more.*

Mental Strategies – Compensation Strategy

❖ We can also use the Compensation Strategy when subtracting decimals.

Follow these steps for the compensation strategy when subtracting decimals:

1   Round the number closest to the whole number.

2   Compensate for rounding:

52.5 − 3.9 ➜ 52.5 − 4   *We rounded up by 0.1,*
    = 48.5 + 0.1 *which means we*
    = 48.6   *subtracted extra so we need to add 0.1*

65.4 − 8.3 ➜ 65.4 − 8   *We rounded down by 0.3,*
    = 57.4 − 0.3 *which means we did not*
    = 57.1   *subtract enough so we need subtract 0.3*

Mental Strategies – Compensation Strategy

❖ Now it is your turn to try. Complete these 3 questions again but this time using the Compensation Strategy. You need to show your working.

a) 575 - 52 =

b) 1305 - 75 =

c) 84.3 - 2.9 =

Mental Strategies – Bump Strategy

❖ Another addition and subtraction mental strategy that we can use is the Bump Strategy. This is similar to the Compensation Strategy, but we generally 'bump' up or down to the nearest 10 for one number and then do the opposite to the other to keep the equation equal.

Addition Bump Strategy

1 Bump the number closest to a multiple of ten. This makes the problem easier to do in our heads.

2 Adjust the other number so the difference between the 2 numbers stays the same. This keeps the problem the same.

3 Solve this easier problem. This then gives us the answer to our original problem.

(89) + (24)

+1   −1

90 + 23 = 113

THINK

The bump strategy is when the number closest to ten gets impatient to start the addition process. The other number must adjust to compensate.

Mental Strategies – Bump Strategy

❖ This is similar to the Compensation Strategy, but we generally 'bump' up or down to the nearest 10 for one number and then do the opposite to the other to keep the equation equal.

Subtraction Bump Strategy

1 With subtraction, we need to bump the **second** number to a multiple of ten. This makes the problem easier to do in our heads.

2 Do the same to the other number so the difference between the 2 numbers stays the same.

3 Solve this easier problem. This then gives us the answer to our original problem.

$$(65) - (22)$$
$$-2 \qquad -2$$
$$63 - 20 = 43$$

THINK

The bump strategy is when the number closest to ten gets impatient to start the subtraction process. The other number must adjust to compensate.

Mental Strategies – Bump Strategy

❖ Now it is your turn to try to use the Bump Strategy.

Use the bump strategy for these additions, bumping the first number each time. Write the rearranged sum underneath. The first one has been done for you.

a 79 + 15

| +1 | −1 |

80 + 14 = 94

b 88 + 26

| +2 | −2 |

c 32 + 56

d 83 + 12

e 61 + 24

Use the bump strategy for these subtractions:

a 46 − 19

b 85 − 33

c 64 − 21

d 56 − 42

Reflection

- I understand and use a variety of mental subtraction strategies to solve a specific problem.

- I have an understanding of the Bump Strategy for mental addition & subtraction.

- What is one new thing you learnt today in Mathematics?

_____

_____

_____

It's Prodigy Time
Remember to log into your class Prodigy account and enjoy up to 30mins of Prodigy Time!

Click on the link below:

What can everyday life be like in a country in Asia?

LEARNING INTENTION:

Students will be able to:

Examine the lifestyle and social differences of certain places in Asia.

Investigate the demographics of some specific Asian countries.

Tuesday – Geography

(▶) Watch the train market video.

What do you see, think and wonder?

_____

_____

(▶) Watch the sherpas video.

What do you see, think and wonder?

_____

_____

(▶) Watch the sulphur miners video.

What do you see, think and wonder?

_____

_____

Complete a PMI chart for each of the jobs showcased in the videos.

	Plus	Minus	Interesting
Market stall holders of Thailand			
Sherpas of Nepal			
Sulphur miners of Indonesia			

Tuesday - Geography

Choose one of the videos from Question One and watch it again. Conduct your own research into the lifestyle of the people who live in this area.

Start by creating and adding more questions to the question wall below.

What is the natural environment like?

What type of homes do people live in?

Is school compulsory?

What is the population?

What do people do for fun?

What type of jobs do people do?

Samut Songkhram in Thailand.

Khumjung or Namche Bazaar in Nepal.

Banyuwangi regency in Indonesia.

Tuesday - Geography

Once you have a good set of geographical questions, use your home resources and conduct internet research to find answers to these. Present your information in an infographic style brochure about the place you have studied, including things such as fast facts, graphs, maps, drawings and other interesting ways you'd like to present your information.

Wednesday

Activities

be
STRONG

Wednesday – Spring Literacy

Spring in Australia

Learning Intention

- ✓ I can find the important information in a text and use this to answer questions

Read the text 'Spring in Australia'.
Answer the questions using the information from the text.

After you have answered the questions, tick whether you were successful today.

Were you successful today?

☐ I can find the important information in a text and use this to answer questions

Spring in Australia

Seasons in Australia

Most people in Australia refer to the European four seasons: summer, autumn, winter and spring. Each season lasts for three months. However, there are six different climate zones in Australia. This means that the seasons vary across the country. In the tropical areas of Australia, particularly those closest to the equator, many people refer to the wet and dry season, which each last six months. Indigenous communities have their own descriptions of seasons based on the weather and the impact each season has on the animals, plants and land. Some communities have five or six seasons, which are more precise and detailed compared to the four standard seasons.

The Weather in Spring

During spring, there is more daylight, which increases on a daily basis. In spring the weather can vary dramatically. Although there may be some warmer weather, it can also be a wet season as frost, wind, rain, sun and even snow can be experienced.

Animals in Spring

In Spring, many animals and birds reproduce. There is an abundance of food and the days are longer for the parents to find their food. Animals may also start to shed their winter coat in preparation for the warmer weather. Creatures that hibernate will start to wake up and become active. Hibernation is the way some animals survive during the colder months by lowering their body temperature, not moving or eating. Native Australian animals that hibernate are some types of possums, bats and echidnas.

Plants in Spring

Plants need water and sunlight to grow. Spring provides the perfect environment for new growth. The rain provides the water and the increased sunshine gives plants the required energy to grow. Deciduous trees (trees that lose their leaves for winter) will grow their leaves back. Almost all native trees in Australia are evergreens – they keep their leaves throughout the year. Flowers may also start to bloom due to the warmer weather. Fruits, such as apples, pears, avocados, lemons, mandarins and strawberries, begin to grow.

Spring in Australia

Why Do the Seasons Happen?

Seasonal changes are caused by the tilt of the Earth's axis as it orbits the Sun. When the Earth orbits around the giant star, each place on the Earth gets a slightly different amount of sunlight. For six months of the year, Antarctica is tilted towards the Sun. During this time, spring occurs in the southern hemisphere. In Australia, spring happens during September, October and November. When Antarctica is tilted away from the Sun, it is springtime in the northern hemisphere.
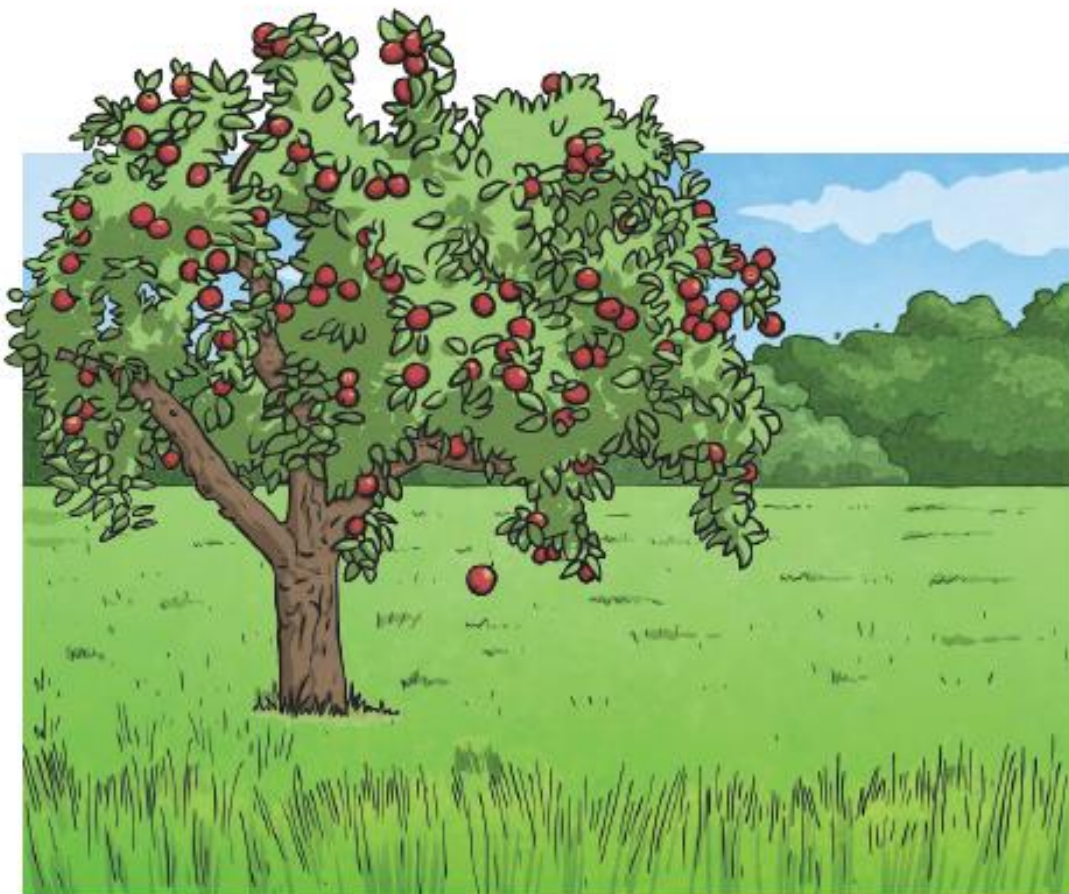
Wednesday - Spring Literacy

Answer the questions using the information from the text.

1. How long is Spring?

2. Thinking about where you live, which way of describing seasons suits your home best? Why?

3. Describe the weather in Spring.

4. Why is Spring an important season for animals?

5. Why does Spring provide a perfect environment for new growth?

6. What is the difference between a deciduous and an evergreen tree?

7. Why do we have seasons?

HOMONYMS: to/too/two

There are three ways to spell 'to', and it is important to know when to use the right spelling, as each one has a different meaning.

To – expresses motion in a direction.

e.g. "he went to the shops." Or "Come to me."

Too – means 'also/as well'.

E.g. "Can I come, too?" Or "Billy got an ice-cream; can I have one too?"

- It also means 'excessive'.

E.g. "That tv is too loud." Or "There are too many people on this boat."

Two – the number 2.

E.g. "Can I have two lollies? One for me, one for my sister."

Circle the correct homonym in each sentence.

I went to/too/two my cousin's house for dinner.

I ate to/too/two much and felt sick.

The cars were driving to/too/two fast.

Can I have to/too/two bowls of ice-cream?

Let's go to/too/two the beach.

There are to/too/two many steps up to Oxford and Cambridge.

When I was to/too/two I got a teddy bear.

My dog is to/too/two years old.

I'm going to/too/two the skatepark.

I went riding with my to/too/two friends.

My sister went shopping to/too/two.

The machinery was to/too/two loud.

My dog barks to/too/two much.

The heritage site was to/too/two hundred years old.

Don't be home to/too/two late!

My aunt went to/too/two Paris last year.

It was to/too/two windy yesterday.

It was to/too/two windy yesterday.

We'd better go to/too/two see the principal.

Everyone tells me what to/too/two do.

The astronauts went to/too/two space.

Mathematics Week 9
Addition & Subtraction
~Written Addition & Subtraction Strategies~

Revision

❖ For revision I want you to start at 112 and add 13 each time for 6 terms... I will do the first for you.

112, 125, _____, _____, _____, _____, _____

Written Strategies - Addition

❖ There are times when it is important to be able to complete addition & subtraction problems using a written method. Some of the time we use a written strategy to confirm that our mental strategy is correct.

❖ The most common written strategy is using a vertical algorithm. It is very important that we line up our place values correctly. Estimation is also very important!

❖ Let's look at this example of addition.

H	T	U
¹2	¹3	5
+ 4	8	9
7	2	4

How do we add using a written strategy?
First we estimate: 235 + 500 = 735. Our answer will be around 735.
We start with the units. 5 + 9 is 14 units. We rename this as 1 ten and 4 units.
We put the 4 in the units column and carry the 1 to the tens column.
3 tens plus 8 tens plus the carried ten is 12 tens.
We rename this as 1 hundred and 2 tens
We put the 2 in the tens column and carry the 1 to the hundreds column.
We add the hundreds. We put 7 in the hundreds column.
Finally we check against our estimate – do they match?

Written Strategies - Subtraction

❖ We can also use a similar strategy when subtracting. It is important to note that sometimes we need to rename a numeral if the top number is lower than the bottom. Follow along with this example.

H	T	U
9	⁸9̶	¹4
− 2	7	8
7	1	6

First we estimate: 1000 – 300 = 700
We start with the units. We can't take 8 away from 4 so we must rename one of the tens as units. We now have 14 units.
14 subtract 8 is 6 so we put the 6 in the units column.
8 tens subtract 7 tens is 1 ten so we put a 1 in the tens column.
We subtract the hundreds. 9 hundred subtract 2 hundred is 7 hundred. Put a 7 in the hundreds column.
We check the answer against our estimate.

Written Strategies – Addition Alternative

❖ Just like in mental strategies there are other written strategies as well. Have a look at this way of adding by adding up the place values separately similar to the split mental strategy.

	H	T	U
	5	6	2
+	1	4	5
			7
	1	0	0
	6	0	0
	7	0	7

We can also add each place value separately and then add these together:

2 + 5 = 7

60 + 40 = 100

500 + 100 = 600

7 + 100 + 600 = 707

Written Strategies

❖ Now it is your turn to have a go at completing these equations.

a
	H	T	U
	5	4	1
+	3	1	3

b
	H	T	U
	1	7	3
+	5	9	2

e
	H	T	U
	7	2	4
+		2	9

c
```
    4 2 1 8
  -   3 7 5
```

d
```
    5 9 1 6
  -   7 2 8
```

Written Strategies – Decimals

❖ Just like in other written methods lining up the place value is very important! We have looked at this already in week 7. Here are a few activities to refresh.

a

T	U	T
8	• 4	3
− 3	• 2	3

b

T	U	T
9	• 0	8
− 5	• 3	2

c

T	U	T
7	• 6	3
− 2	• 0	4

d

T	U	T
9	• 7	
− 3	• 2	3

e

T	U	T	H
5	2 • 1	7	
+ 3	5 • 9	2	

f

T	U	T	H
	4	5 • 1	
+ 1	4 • 0	5	

g

T	U	T	H
5	3 • 8	9	
+ 1	2 • 1	4	

h

T	U	T	H
3	2 • 4	1	
+ 1	9 • 3	3	

Written Strategies – Application

❖ Have a go at this activity. You will need to use a calculator. Read the instructions carefully.

Use a calculator to add each group of numbers. Turn your calculator upside down to see a word on the screen. Use the key below to help you identify the letters. Write each word in the correct place in the crossword puzzle.
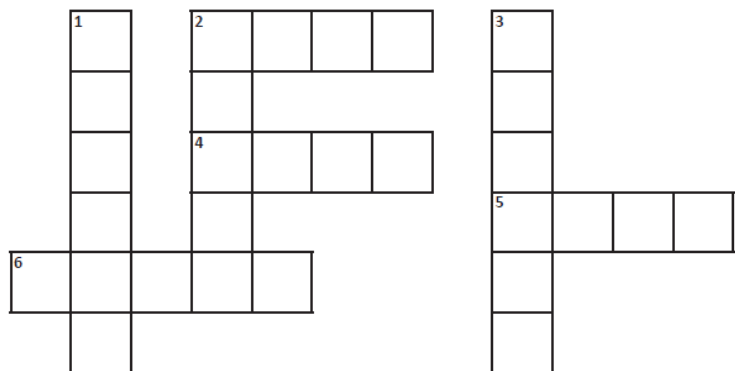
CLUES

Across

2. 3 025 + 1 589 = _____

4. 4 456 + 1 207 = _____

5. 2 776 + 2 861 = _____

6. 12 824 + 32 251 = _____

Down

1. 34 569 + 342 047 = _____

2. 20 786 + 36 548 = _____

3. 456 789 + 120 556 = _____

Key

0	1	3	4	5	6	7	8
O	I	E	H	S	G	L	B

Reflection

o I understand and use a variety of written addition & subtraction strategies to solve a specific problem.

o I know that the most important step is to line up the place values.

o What is one new thing you learnt today in Mathematics?

_____

_____

_____

It's Prodigy Time
Remember to log into your class Prodigy account and enjoy up to 30mins of Prodigy Time!

Click on the link below:

Wednesday - PD/H

Week 9 - Mindfulness

Watch the Mind Yeti video 'You're your Yeti
Body': https://www.youtube.com/watch?v=ge8CqeffVaw&list=PLiaUKiwbiHMQDQL
CXoPaMMYotIdKIUQCw&index=5

Activity:

1. Draw a picture of you in your Yeti Body. Make sure to include the string pulling up from above you and your feet on the floor.

2. Explain more about your drawing and how it felt when you were in your Yeti Body.

Getting into your Yeti Body can help you feel more focused and readier for your day. Watch the video to learn all about what your Yeti Body should look like and how to practice finding it.

Think: Were you able to find your Yeti Body? How did your body move or change when you imagined the string pulling on you? How does your Yeti Body make you feel?

Thursday

Activities

be
INSPIRED

Thursday - Writing

Sensory poem

Learning Intention

✓ I can use my 5 sense to write a descriptive poem about a particular topic

Explore Spring through your senses.
Complete the sentences to create your very own Spring sensory poem. Then illustrate your poem.

Miss Meyers' example:

Spring looks like beautiful shades of colour have spray painted the world
Spring sounds like singing birds and buzzing bees happily greeting the new day
Spring smells like freshly cut grass and a warm apple pie straight out of the oven
Spring tastes like sweet treats and delicious juicy fruits
Spring feels like warm sunshine, a cool breeze and everything is new again

Complete the sentences to create your very own Spring sensory poem. Then illustrate your poem.

Spring looks like _____

Spring sounds like _____

Spring smells like _____

Spring tastes like _____

Spring feels like _____

Thursday - Writing

Draw your spring sensory poem here OR make a collage and take a photo of what Spring looks like, sounds like, smells like, tastes like and feels like to you.

Were you successful today?

☐ I can use my 5 sense to write a descriptive poem about a particular topic

Science Literacy
Understanding the Gravitational, Normal & Applied Forces. Part 2

Learning Intention

To develop a sound understanding of the normal, applied and gravitational forces and how they relate to the general understanding of the physical world.

What is Gravity? Continued – Albert Einstein

- Albert Einstein, however 200 years later, developed another very important theory about gravity. Einstein's **general theory of relativity** uses the idea of **spacetime**. According to the general theory of relativity, any mass causes <u>spacetime to curve</u>, and any other mass follows these curves. <u>Bigger mass causes more curving</u>. This was a new way to explain gravity.

- General relativity explains **gravitational lensing**, which is <u>light bending when it comes near a massive object</u>. This explanation was proven correct during a solar eclipse, when the sun's bending of starlight from distant
stars could be measured because of the darkness of the eclipse.
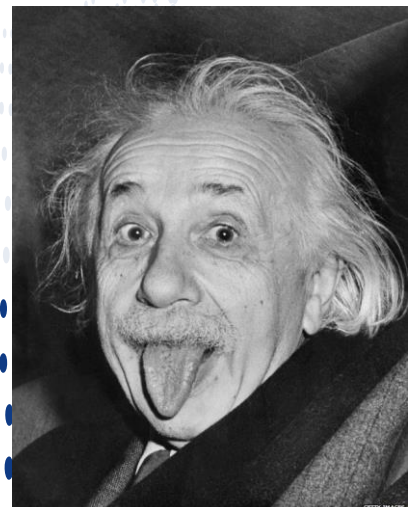
What is Gravity? Continued – Albert Einstein

- Watch these two videos that explain Einstein's contribution to the gravitational force debate and also his Theory of General Relativity.

- You need to take notes by identifying the main ideas and details then use the information in the videos and on the previous slide to write a paragraph, **in your own words**, about why Albert Einstein is so influential and important in the Science community.

Video 1 – YouTube - https://youtu.be/t_X5nT_zePo
Video 1 – Google Drive - https://drive.google.com/file/d/107UPe2cX-fK-U6-qcQIPt9VJevalOn-W/view?usp=sharing

Video 2 – YouTube – https://youtu.be/s9hkK7NOAD0
Video 2 – Google Drive - https://drive.google.com/file/d/1AqqhwUj7hyrWC4NeXEJy5TYuMSCgKe0_/view?usp=sharing
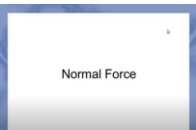
- Take your notes that identify the main ideas and details of the videos here.

What is Gravity? Albert Einstein Task

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

What is The Normal Force?

- There's another really important force called the **normal force**, also sometimes called the **support force**. This is the force that supports the weight of an object on a surface. We should be grateful for this force because it's what keeps you from falling through the floor!

- The normal force is the force that the ground (or any surface) pushes back up with.

- The normal force on a object is **always perpendicular** (at a right angle) to the surface the object is on.

- Watch the two videos below and then draw and label a picture describing the Normal Force.

Video 1 – YouTube - https://youtu.be/1pbGP-MRN-0
Video 1 – Google Drive - https://drive.google.com/file/d/1IBZAFrWh2atdknBinGBcugicv3MQPQqJ/view?usp=sharing
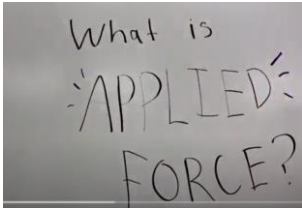
Video 2 – YouTube - https://youtu.be/aJc4DEkSq4I
Video 2 – Google Drive - https://drive.google.com/file/d/1UVO_A27Q-X9clqs-jQ3kgLJwNtjjj9bL/view?usp=sharing

Draw your diagram here.

What is an Applied Force?

- An applied force is a force that is applied to an object by a person or another object and is linked very closely to the Normal Force. If a person is pushing a desk across the room, then there is an applied force acting upon the object. The applied force is the force exerted on the desk by the person.

Video Link – YouTube - https://youtu.be/Asi31-OpgS8
Video Link – Google Drive - https://drive.google.com/file/d/1GjsmEjeub3IsfHuNzzlWu7oVR56ih RTk/view?usp=sharing

How do these forces relate?

Now that you have learnt about the Normal, Applied & Gravitational forces tell me how you think they are all related to each other? You can use diagrams to assist you.

_____

_____

_____

_____

_____

_____

_____

_____

Mathematics Week 9
Addition & Subtraction
~Applying Strategies in Word Problems~

Learning Intention
- To be able to efficiently select a mental or written strategies to solve addition & subtraction problems & equations.

Success Criteria
- I can recognise the need to use a mental or written strategies for addition & subtraction to solve a specific problem.

Revision

❖ For revision I want you to start at 1102 and subtract 13 each time for 6 terms... I will do the first for you.

1102, 1089, _____, _____, _____, _____, _____

Word Problems

❖ There are a significant amount of times where addition or subtraction problems are represented as word problems. It is important to practise how to identify the information you need to solve the problem and also how to select the right strategy for you to be able to answer the problem. Through this presentation you come across a number of different word problems for you to decipher and answer.
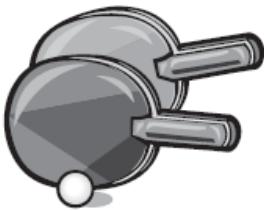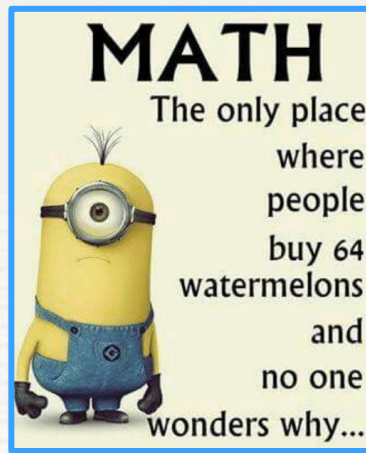
MATH
The only place where people buy 64 watermelons and no one wonders why...

Table tennis $28.60   Baseball $42.15   Boxing $135.95

a   The table tennis set costs $34.90 at the store down the road. If Gillian buys it here for $28.60, how much does she save?

b   Sanjeev saved $55.50 to buy the baseball kit. How much of his savings remain after buying the kit?

c   If she had a voucher for a $8.75 discount, how much did Katya pay for the boxing gloves?

Word Problems

Solve these subtraction problems using a mental strategy:

a Nariah has $436 saved. She buys a new MP3 player costing $127. How much money does she have left after the purchase?

b Unfortunately Nariah loses her 4th school jumper for the year. Her mum refuses to pay for another and Nariah has to cover the cost of $52 herself. How much of her savings does she now have left?

❖ Solve these money problems using a strategy of choice:

a) You have $98.00. The total of the groceries is $67.00. How much change will you get after you pay for your groceries?

b) How much will you save if you buy an item on sale that was $76.95 and is now $68.99?

c) Hugo's total grocery bill before subtracting his coupons was $77.84. If he had $5.87 in coupons, what was his final bill?

d) Your mum gives you $10.00 to go to the bakery to buy morning tea. You buy 3 items at the bakery for a total cost of $8.25. You have a discount voucher worth $1.05. How much change will you get back?

Word Problems

❖ Solve these problems using a strategy of choice:

a) Jenny is 32 cm taller than Jaala. Jaala is 143 cm tall. How tall is Jenny?

b) The rainfall in Two Wells was 73 mm. Gawler recorded 36 mm less. How much rainfall did Gawler record?

c) Jarred's bike cost $189. Molly's bike cost $263. What is the price difference between the two bikes?

d) Joe scored 346 more points than Zac. Joe scored 589 points. How many points did Zac score?

❖ Now it is time for you to write your own word problem and show the strategy you used to solve the problem.

_____

_____

_____

_____

Reflection

○ I can recognise the need to use a mental or written strategies for addition & subtraction to solve a specific problem.

○ I can make a decision about which strategy to use when solving a word problem.

○ What is one new thing you learnt today in Mathematics?

_____

_____

_____

It's Prodigy Time
Remember to log into your class Prodigy account and enjoy up to 30mins of Prodigy Time!
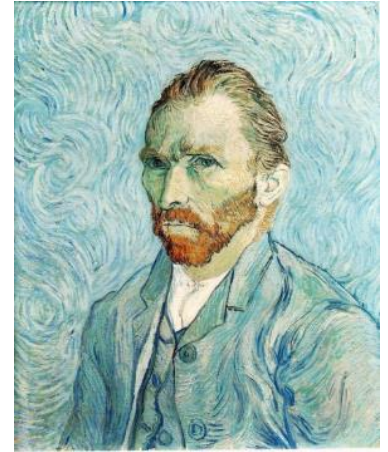

Click on the link below:

The term monochrome comes from the Ancient Greek: μονόχρωμος, romanized: monochromos, lit. 'having one colour'. A monochromatic object or image reflects colours in shades of limited colours or hues.

What is monochrome art?

Mono means one and chrome means colour, so monochrome art is art that is created using just one colour.

Vincent Van Gogh (1853-1890)

He started painting flower still lifes to experiment with colour. There are five versions of his *Sunflowers* (1888) artworks which can be found in museums around the world. He also painted two other versions. One is in in a private collection and another was lost during World War II.

Van Gogh is one of the most famous artists in the world.

He began his artist journey using just drawings in black and white. He believed mastery of this discipline to be essential before working with colour.

The large Van Gogh artworks on this page are almost monochromatic. What effect does this use of colour have?

Thursday – Creative Arts
Monochromatic Art

1. What 3 jobs did Van Gogh have before becoming an artist? Where were those jobs? _____
_____
_____

2. What was Van Gogh's first true artwork? What did critics think of it?
_____
_____
_____

3. What plans did Van Gogh have for his yellow house?
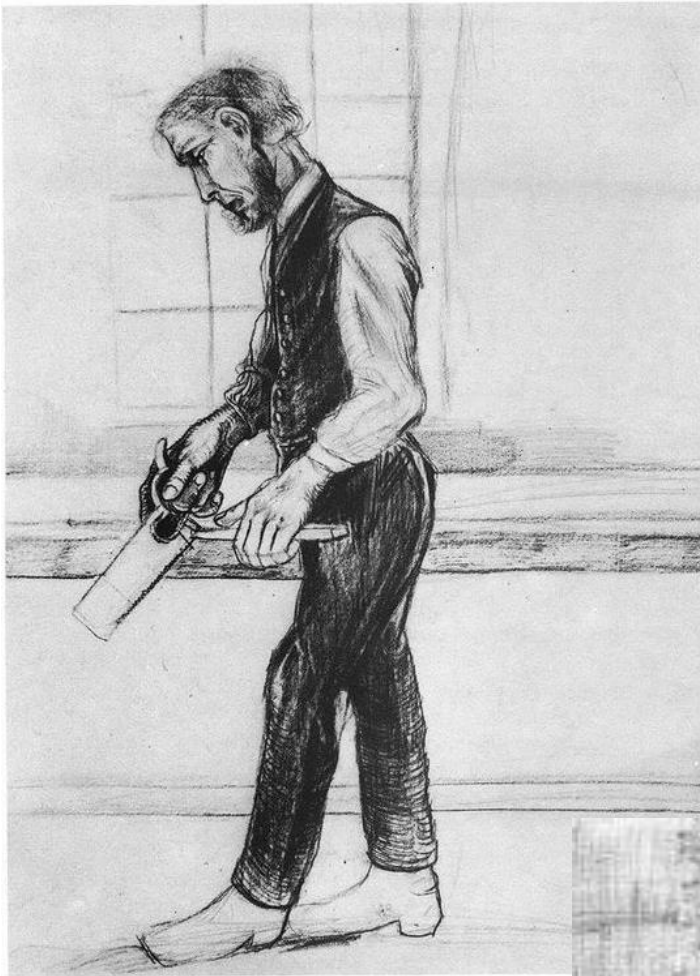_____
_____
_____

4. Pause the video on an artwork that you like. What is it? Why do you like it?
_____
_____
_____

5. Pause the video on an artwork that you don't like. What is it? Why don't you like it? _____
_____
_____
_____

6. "What are you good at?"
_____
_____
_____

Carpenter, 1880

Van Gogh's entire artistic career was in the last 10 years of his short life. For the first two years he did nothing but struggle to teach himself to draw. The impressive improvements he made can be seen in these two drawings.

Grisaille, is a type of monochrome painting done completely in grays, coming from the French (and Latin and Spanish) term for gray.

Woman Mourning, 1882

Friday Activities

be
THANKFUL
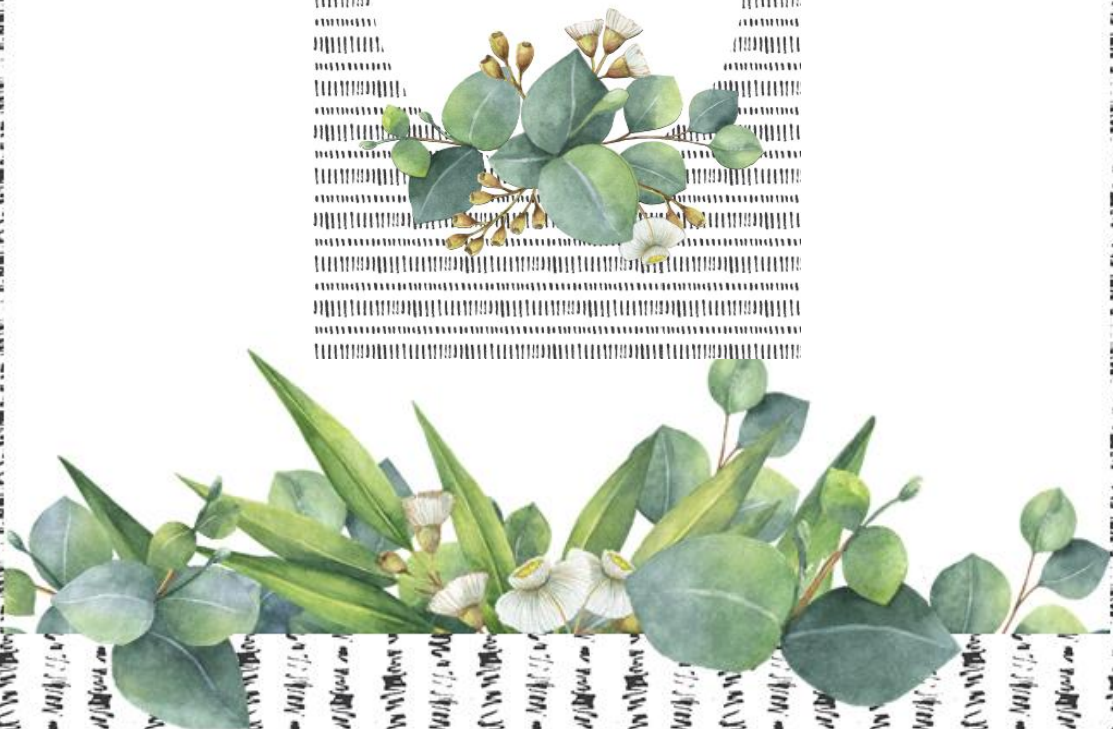
Friday – Spring literacy

Complete at least 2 of the activities on the matrix.   You can choose to do more activities if you wish.

Become a wildlife detective and go on a minibeast hunt with a grown-up.	Fly a kite on a windy day.	Create a picture of a butterfly. Can you make sure that the wings are symmetrical?
Write an acrostic poem about a springtime word of your choice.	Ask your friends and family to tell you what their favourite thing about spring is. Make a list of their answers.	Become a flower detective! Can you spot any of the flowers or plants on this **Plants and Flowers Hunt Sheet.**

Spring
Home Learning
Activities
Colour in the box as you complete each activity!

Create a painting of blooming spring flowers.	Make bird feeder and draw pictures to record some of the birds that use it. You could even use these **instructions** to create a pine cone feeder.	Create a beautiful blossom tree painting. You could use these **craft instructions** to help you.
Look out for butterflies and mark them off on this **Butterfly Checklist.**	Go for a walk with an adult and look out for the things on this **Spring Hunt Checklist.**	Can you create a springtime picture using natural materials?
	Use plant seeds to grow some flowers or plants. These **display posters** might be some help!	Write your own springtime story.
	Go on a sensory spring walk with an adult. What can you see? What can you smell or hear?	Go to the park with a grown-up and look out for signs of spring. Take photographs or make a list of what you spot.

Spring in Australia

```
r  e  g  r  o  w  t  h  v  g  h  r  i
e  n  o  p  e  c  h  i  d  n  a  x  u
n  b  a  t  c  p  e  b  r  h  e  a  w
e  l  x  u  b  o  q  e  a  r  t  h  v
w  x  y  s  a  s  c  r  e  b  g  y  f
a  j  k  e  m  s  o  n  q  r  s  t  b
l  v  w  a  y  u  a  a  c  e  p  f  k
g  f  i  s  k  m  m  t  o  e  r  r  o
s  p  y  o  u  n  g  e  a  d  i  d  a
v  e  r  n  a  l  e  q  u  i  n  o  x
q  b  e  r  l  t  h  q  y  n  g  b  i
c  d  a  y  l  i  g  h  t  g  p  n  s
l  q  n  e  f  r  o  g  s  p  a  w  n
```

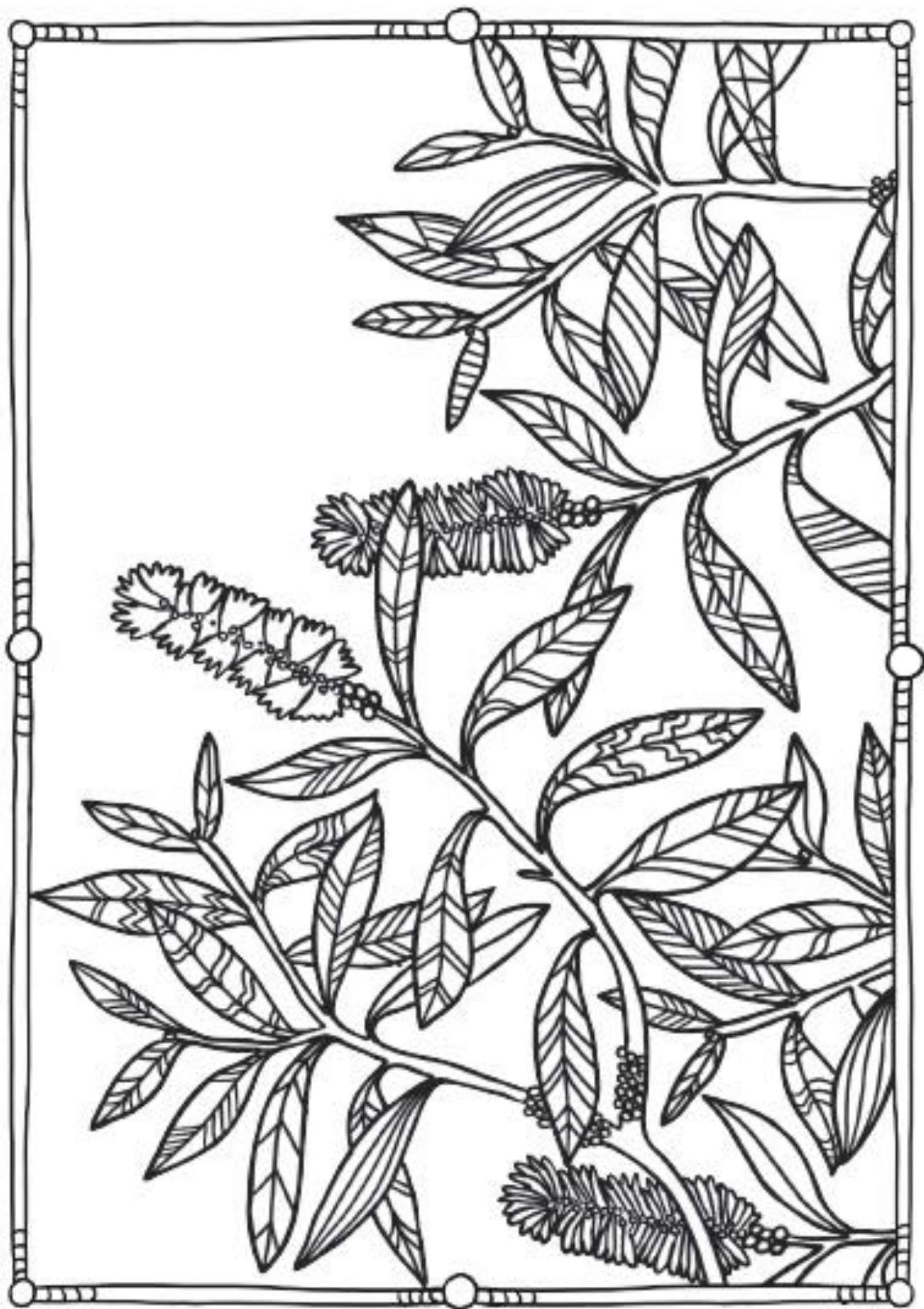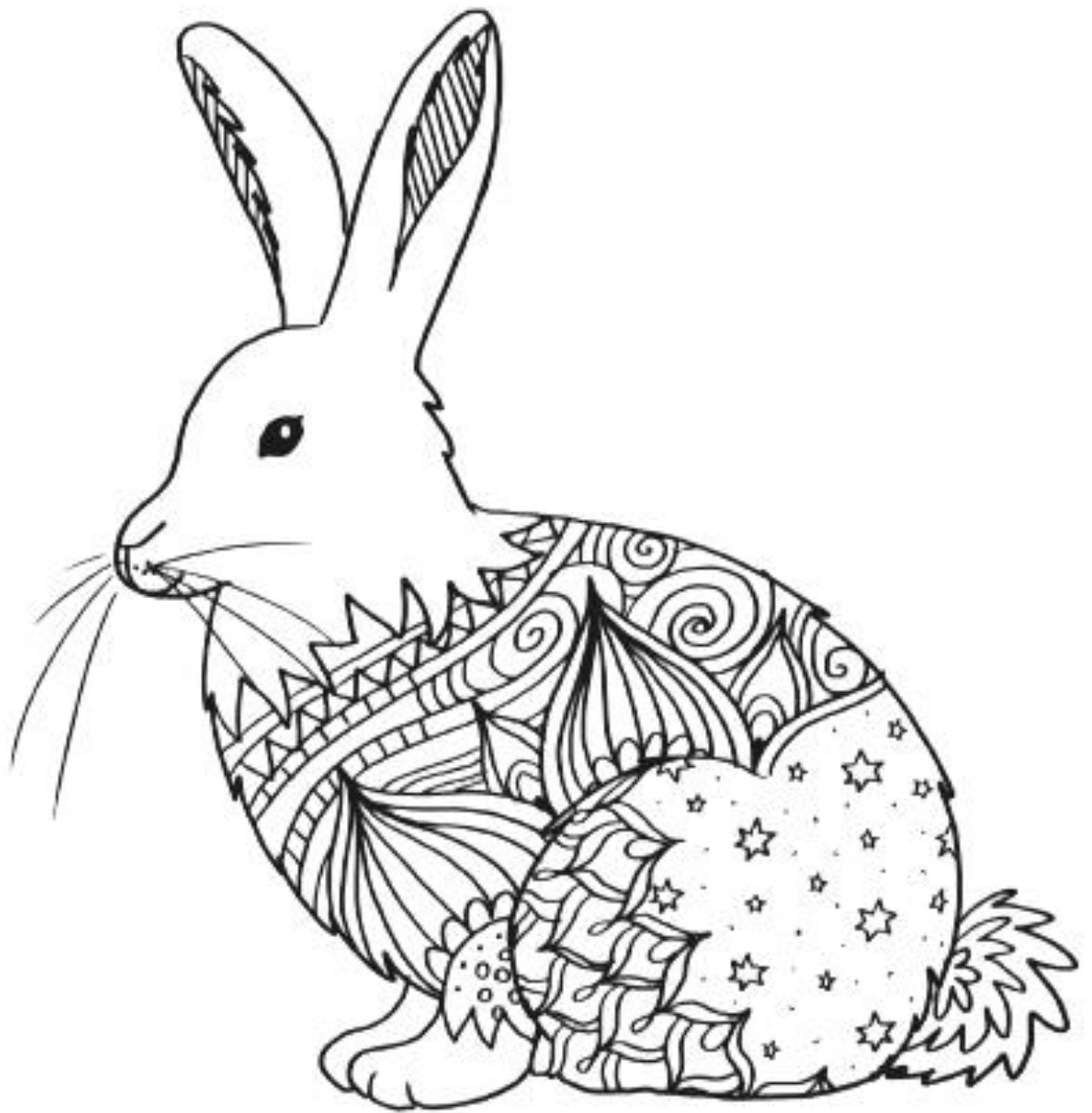|			
hibernate	spring	axis	breeding
possum	season	Earth	renewal
echidna	young	frogspawn	bat
daylight	vernal equinox	regrowth	

Friday - Spring literacy

<u>Answer the following questions:</u>

The 2 activities I chose to complete were:

1. _____

2. _____

I completed more activities from the home learning matrix?   YES / NO

Complete the find-a-word activity on the next page

I completed the find-a-word?   YES / NO

I completed at least one mindfulness colouring sheet?

YES / NO

Friday - Writing

Answer the following questions:

1. What was your favourite activity this week during Wellbeing week?

2. Why was this activity your favourite?

3. What are some activities or hobbies you like to do for enjoyment, relaxation and wellbeing?

4. What could you do to improve the wellbeing of those around you, such as friends and family?

Mathematics Week 9
Addition & Subtraction
~Applying Strategies in Word Problems~

Learning Intention
- To be able to apply written and mental addition & subtraction strategies to develop a new set of problems in a creative way.

Success Criteria
- I can use my knowledge of addition & subtraction strategies to create a board game that utilises them.
- I can explain the mathematics used in my board game.

Problem of the Day

❖ Barry goes to Woolworths and buys 24 watermelons for $3 each. He then goes to Coles and buys 12 watermelons for a total of $48. Finally he goes to Aldi and buys 10 watermelons for $2.50 each.

a) How many watermelons did Barry buy? _____

b) How much did Barry spend on watermelons? _____

Applying Your Skills & Knowledge – Challenge

❖ Your challenge for today is to <u>create a board game that uses addition & subtraction as its main objective.</u> This means that the players of your board game must use addition and/or subtraction in some way while playing – this may be with dice, card, answering questions, etc. **<u>Be Creative!</u>**

❖ You need to make your board game thinking about your target age bracket. It can be a physical or digital board game.

❖ You will need to explain all the maths that is involved in your board game.

❖ You need to play your game to make sure it works.

Think of a number between 0 and 20. Add 32 to it. Multiply by 2. Subtract 1. Now close your eyes. Its dark Isn't it

❖ Explain the rules and how to play your game, include how the game finishes:

_____

_____

_____

_____

_____

_____

_____

_____

❖ **Please draw your board game here.**

❖ **Please draw your board game here.**

Applying Your Skills & Knowledge – Challenge

❖ Explain how your board game uses addition & subtraction:

_____

_____

_____

_____

❖ Explain the other maths that is involved in your board game:

_____

_____

_____

Reflection

○ I can use my knowledge of addition & subtraction strategies to create a board game that utilises them.

○ I can explain the mathematics used in my board game.

○ What is one new thing you learnt today in Mathematics?

_____

_____

_____

Non-screen activities for book lovers

Pobble

These 25 fun book-based ideas will help you explore your favourite stories and maybe inspire your own!

25 ideas!

1 Can you take the story from your favourite book and turn it into a short poem?

2 Write a letter to your favourite author. What will you tell them or ask them?

3 Alternative ending. Think of your favourite book and re-write the final chapter of it.

4 Get creative! Make your own bookmark to use when you read. How will you decorate it?

5 Turn your favourite book into a comic strip. Writing a story doesn't always have to be about the words!

6 Reading wish list. Make a list of all the books you'd like to read in the future.

7 Decorate an item to look like your favourite book character. You could choose a stone, a wooden spoon or something else!

8 Turn the story of your favourite book into a play script. Can you act it out?

9 Story mash-up! Write a new story that mixes together your favourite characters from different books.

10 Make a puppet of a famous book character. You could use a sock, a paper bag or even your finger!

11 If you could write a non-fiction book, what would you write about? Write down five facts about your chosen topic.

12 Design a new costume for your favourite book character. How will you make it different from the original?

13 Where is the most unusual place you can find to read a book? Under the bed? Up a tree? You choose!

14 A word of advice. What advice would you give to your favourite book character? How could you help them?

15 Story hunt. Collect items that give clues to a book then share them with someone. Can they guess the story?
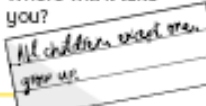
16 Imagine you're a reporter. Write a news report based on a famous book. What happened? Who? Where and how? Don't forget a catchy headline!

17 Can you make a model of a famous book setting? You could use a box and decorate it!

18 Take the first line of your favourite book and use it to write a different story. Where will it take you?

19 What would happen to your favourite character in a different story? Can you write a new tale?

20 Design a new book cover for your favourite book. What will you change?

21 Reading den! Build a den using things from around the house and cosy up in there to read a book.

22 Pretend to be your favourite book character. Act out a part of the story, can your family guess which book it is?

23 Read aloud! Grab your favourite book and read to someone else, your family, a pet or even your toys!

24 Who is the villain in your favourite book? Can you make a wanted poster for them?

25 Get crafty! Make a mask of your favourite book character. You could use a paper plate, some cardboard or something else.