

#### Erina Heights Public School Learning from Home - Stage 2

Term	1	2	3	4							
Weeks	1	2	3	4	5	6	7	8	9	10	11

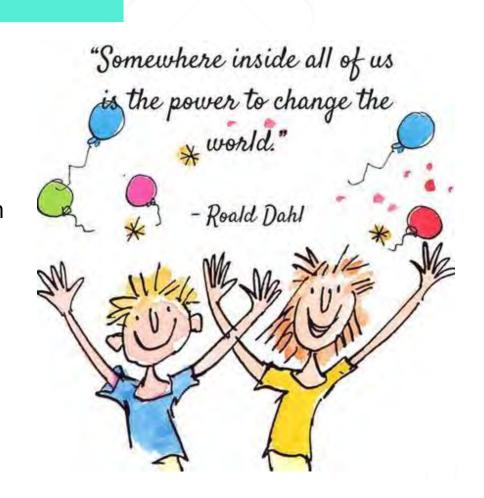
	Monday	Tuesday	Wednesday	Thursday	Friday			
9:00	Daily Zoom Meeting	2/3L Zoom link	3A Zoom Link	3/4C Zoom Link	3/4C Zoom Link			
Morning	Literacy Activities	Literacy Activities	Literacy Activities	Literacy Activities	Literacy Activities			
	Recess Break							
	Maths Activities 3D Space	Maths Activities 3D Space	Maths Activities 3D Space	Maths Activities 3D Space	Maths Activities 3D Space			
Middle	Manga High	Manga High	Manga High	Manga High	Manga High			
	Lunch Break							
Afternoon	Let's Visit Canberra!	Let's Visit Canberra!	Let's Visit Canberra!	Let's Visit Canberra!	Let's Visit Canberra!			
Optional Activities	Last year, the Office of the Advocate for Children and Young People launched a website called Digital Lunchbreak. Children and young people can learn, create and discover through digital workshops, learning materials, virtual excursions and more. Visit the Digital Lunchbreak website by clicking here <a href="https://www.digitallunchbreak.nsw.gov.au">www.digitallunchbreak.nsw.gov.au</a>							



## EXPECTATIONS

## 'Mistakes are proof that you are trying'

- Do one activity each day.
- If you get stuck, send your teacher a message on Google Classroom.
- You can add extra slides to do your answers, otherwise you can do your work in a Google doc or workbook at home.
- Submit your work on Google Classroom.
- Do the best you can! 69



## THE KIDS SHOULD SEE THIS

## Summarising an Article

https://thekidshouldseethis.com/post/waddles-the-duck-gets-a-3d-printed-prosthetic-leg

**Learning Intention:** To write an effective summary of an article.

#### What to do?

- Scan the QR code or click the link above to be taken to the website.
- Watch the video and read the article.
- Then watch the YouTube video on this screen showing how to use the 'somebody, wanted, but, so, then, finally' strategy.

#### Your task:

- Read the example given (next slide) about Waddles the Duck to demonstrate what it should look like.
- Go back to the website and find something interesting to read about and write your own summary using the same 'Somebody, wanted, but, so, then, finally' strategy. There is a slide provided for you.





## THE KIDS SHOULD SEE THIS

## Summarising an Article

Waddles' owner, guitarist (somebody) Ben Weinman wanted Waddles, who only had one leg, to be able to walk again but couldn't have made this happen on his own so he asked pet prosthetic specialist and Bionic Pets owner Derrick Campana if he could help. Then Derrick created Waddles a new leg using a 3D printer. Finally, Waddles was then able to walk again using 2 legs.

Now it's your turn! Go to <u>The Kids Should See This</u> and find your own article to read and write about.

#### **SWBSTF** Somebody -Who is the main character? What are traits to describe them? Wanted What does the main character want? -What is the problem in the story? What gets in the main character's way? -What does the character do to respond to the problem? What are some attempts to solve the problem? -How does the character solve the problem? What is the solution? Finally -What is the life lesson? What did the main character learn? What is the author trying to teach us?

## THE KIDS SHOULD SEE THIS

## Summarising an Article

#### **Link for Article:**

Write your summary here. Don't forget the title of your article.

#### **SWBSTF**

#### Somebody

-Who is the main character? What are traits to describe them?

#### Wanted

-What does the main character want?

#### But

-What is the problem in the story? What gets in the main character's way?

#### 02

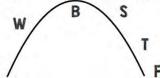
-What does the character do to respond to the problem? What are some attempts to solve the problem?

#### Then

-How does the character solve the problem? What is the solution?

#### Finally

-What is the life lesson? What did the main character learn? What is the author trying to teach us?



# DIRECT & INDIRECT SPEECH

## Change the indirect speech into direct speech

Jason said that he didn't want to go to the beach.

"I don't want to go to the beach," said Jason.

Lisa and Natalie said they needed some money for shopping.

<Type>

Ivy told Hannah to stop running.

<Type>

Harry's mum asked him to pick up his toys.

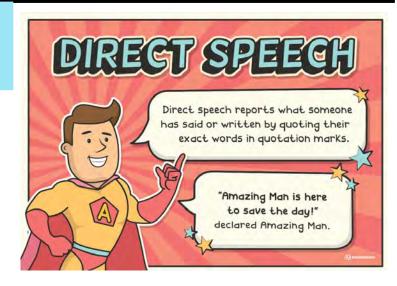
<Type>

Anna asked her teacher if she could play in the sandpit with Scarlett.

<Type>

I yelled out to Dad to tell him that dinner was ready.

<Type>





# EDITING - easier

#### Circle the spelling error and write the correct spelling in the box



The baby was crying becos he was hungry.	
Kane denyed he was the one who broke the vase.	
We finaly finished our project.	
The teacher drew a kerved line.	Drag the
You must always exercise cortion when swimming in new places.	drop the
Uluru is a famus place in Australia.	
I can see my face in the mirra .	words
The bus stoped and the children got on.	spelled incorred
Jake sumtimes surprises his family by making biscuits for them.	
I offen visit my uncle at the weekend.	
Did you notis the red car?	



em

# EDITING - harder

## Circle the spelling error and write the correct spelling in the box



Amy had groan taller over the past year.	
The snowboarders were delayed by a blizzerd.	
Allan liked working with Karen because of her positive atitude .	Drag the
Car fumes polloot the air.	Drag the circles and
The reporter asked the actor for an opinuin on the movie.	drop them
The family lived in tempory accommodation while their house was being built.	over the
The teenager seriously injured his right rist when he fell awkwardly.	words
The tourist guide was ment to provide clear directions.	spelled incorrectly.
High temperatures tipically occur during the summer months.	
A number of echos sounded eerily throughout the gorge.	
The paddocks were severly damaged by erosion.	

# WRITING TASK

## Writing a recipe

https://www.youtube.com/watch?v=keHkhrEzSyo

#### What to do:

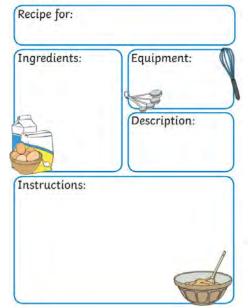
Click the link above and watch the video

#### Do the following:

- Your job will be to write a recipe using the correct format so you will need to take notes first.
- You will need to write down how much of each ingredient and then write down the steps involved in making the cookies.
- Using your notes, write a recipe using subheadings and instructions.
   Remember to be specific. You need to pretend the person following your instructions has never made these before so they need to know all the details.

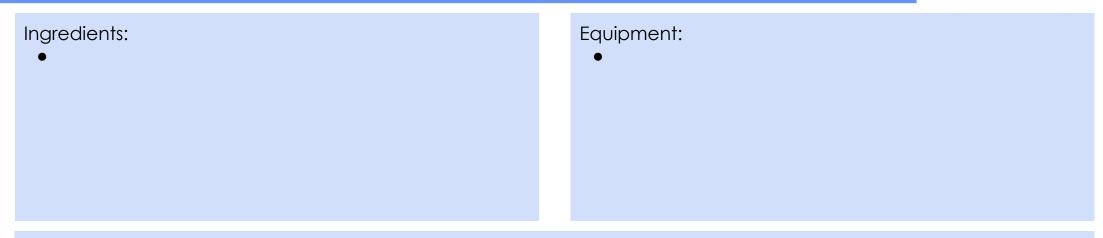
Check you writing to ensure correct spelling and punctuation. Also make sure your writing makes sense. It's a good idea to get someone else to read your work too.





# WRITING TASK

## Chocolate Chip Cookies



Method:

1.

## SPEAKING & LISTENING

### Squiz Kids

https://www.squizkids.com.au/podcast/thursday-5-august-2021/

#### You will need:

An iPad or laptop

#### What to do:

Scan the QR code or click the link to listen to the podcast.

#### Do the following:

- Listen to the podcast episode from Thursday 4th August.
- You will choose 3 topics from the podcast to talk about with a family member. You may need to take notes while listening.
- Record what you told your family members on the next slide.





## SPEAKING & LISTENING

## Squiz Kids

I told my family all about...

Type your answer here

# Maths

•••

Stage 2 - Week 6

### Maths Instructions

- 1. Watch the instructional video before beginning the tasks. You may need to watch this more than once.
- 2. Complete as many activities each day as you can activities should be completed on paper or in a book. Please draw any tables or diagrams that you need to complete these activities.
- 3. To make answering easier, please type into the pink text boxes.

# Practise your multiplication tables









## **PLEASE NOTE**

If it is easier for you to complete this work in a book, then please do so and send a photo to your teacher or submit on Google Classroom if you know how.

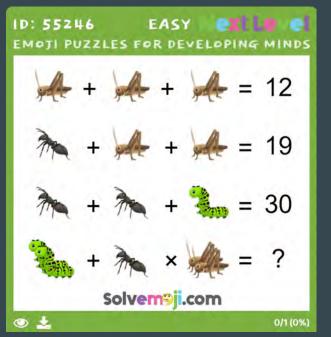
Otherwise - Click on the pink text boxes on the activity slides to enter your answer.

# Monday

Lesson 1

## Ignition Activity 1 – choose your level





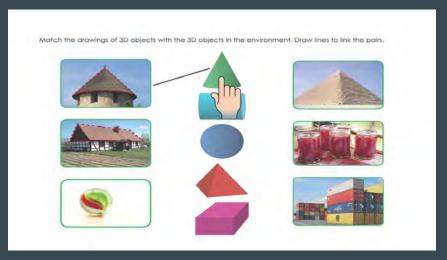








#### **Instructional Video Links -** Click the links below to access the videos



3D Space 1



3D Space Video

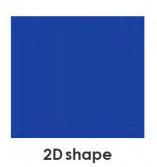
## Glossary

- **curved surface**: the curved outer surface of a three-dimensional (3D) object. Cylinders and cones are examples of 3D objects that have curved surfaces.
- edge: the line where two faces of a three-dimensional object meet
- face: flat surface of a three-dimensional object with only straight edges
- net: two-dimensional (2D) shape that can be folded to make a three-dimensional (3D) object
- prism: a 3D object with two ends identical in shape. All the other faces are rectangles.
- **pyramid:**a three-dimensional (3D) object with a polygon as a base and triangular faces that taper to a point
- **vertex:** the point on a 2D shape or 3D object where two or more lines meet to form a corner. The plural is vertices.



**Three-dimensional (3D)** means an object has length, width and height like many objects you see around you. Your body, for example, is three-dimensional.

Three-dimensional objects are different from two-dimensional (2D) shapes.





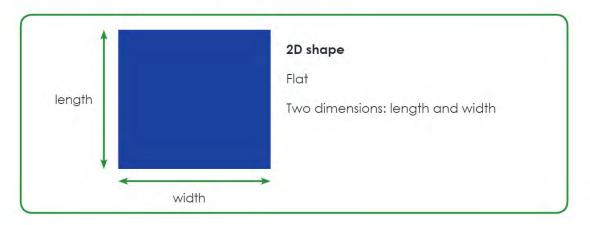
Compare these two images. How would you describe the 2D shape and 3D object in each image? How are they different?

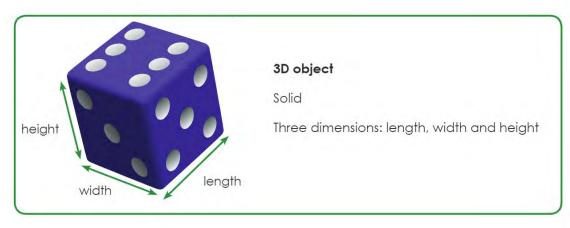
3D Space

← Answer this in the pink text box



Compare the features of 2D shapes and 3D objects in the diagrams.



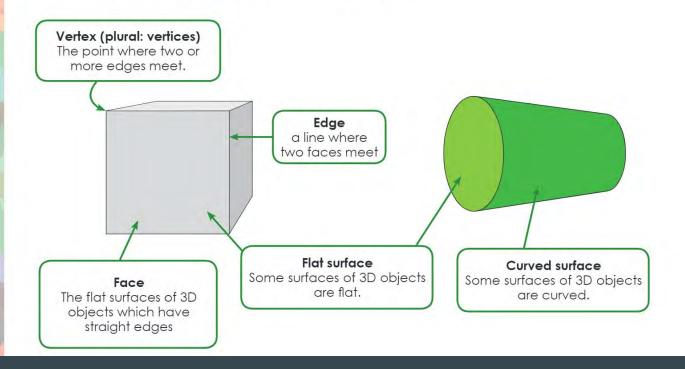




All 3D objects will have some of the features listed in the box.

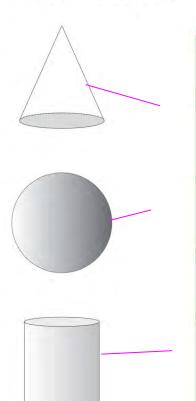
surface (flat or curved) vertex edge face

Look at the diagram below to identify each of these features.



1. Match the 3D objects to the correct name and description.

You will need to look at the features of each one: surface (flat or curved), faces, edges and vertices.



Prism 6 faces 8 vertices 12 edges

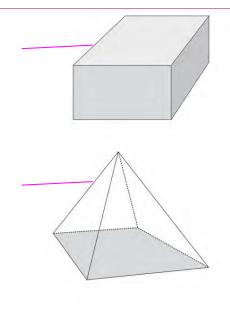
Sphere
1 curved surface

Cone
1 curved surface
1 vertex
1 flat surface

Cylinder
1 curved surface
2 flat surfaces

Pyramid
4 triangular faces
5 vertices
8 edges
1 flat base

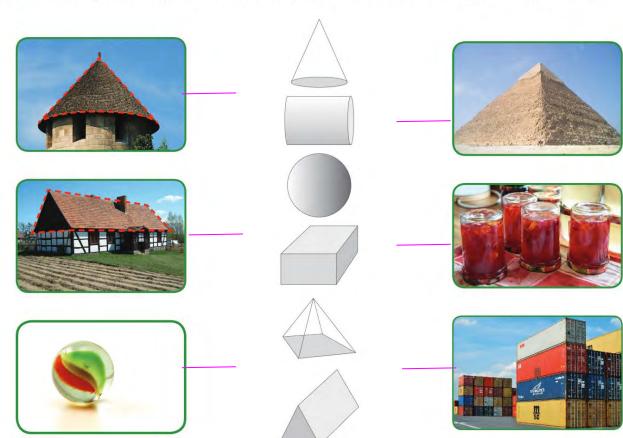
Click on the pink lines and drag them to the correct name or write your answers on a piece of paper.



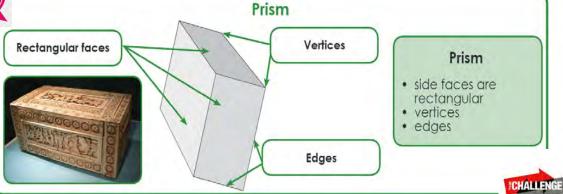
2. If you look around, you will notice common 3D objects. The photographs below show some 3D objects.

Match the drawings of 3D objects with the 3D objects in the environment. Draw lines to link the pairs.

Click on the pink lines and drag them to the correct name or write your answers on a piece of paper.







All prisms share these features, but there are some differences, for example in the shape of the base. The base is the flat surface that the object stands on.

3. Find some everyday objects at home that are prisms. List them in the pink box below.

Example: Breakfast cereal box

Look at the different example of prisms below.

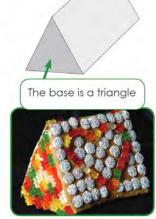


This object is a cube. It is a special prism in which all faces are square.









# Tuesday

Lesson 2

# Ignition Activity 2



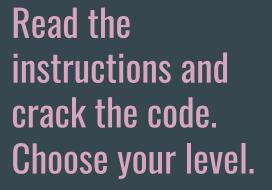


The first number is twice the last number.

The second number is half of 6.

The third number is three times the second number.

The fourth number is  $27 \div 9 = ?$ 







← Answer this in the pink text boxes

The first number is three times the second number. The second number three times the fourth number. The third number is one-third of 75, divided by 5. The fourth number is 20% of the third number.



← Answer this in the pink text boxes

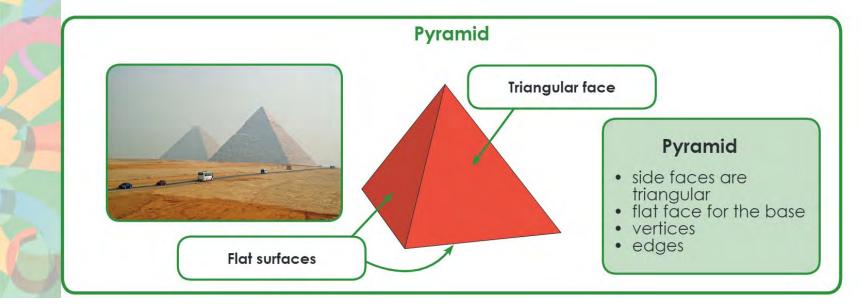
# 3D Shape Scavenger Hunt

You are going to look around and find some examples around you of each of the 3D Shapes in the following slides.

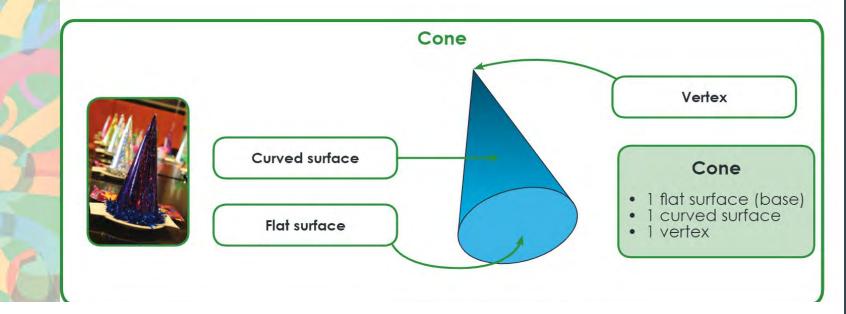
#### **Expectations:**

- 1. Be safe and careful
- 2. If you can't see a 3D shape, you can draw it or think of something that could be that shape
- 3. If you get stuck just go onto the next shape
- 4. Type your answers in the pink text boxes
- 5. Do your best

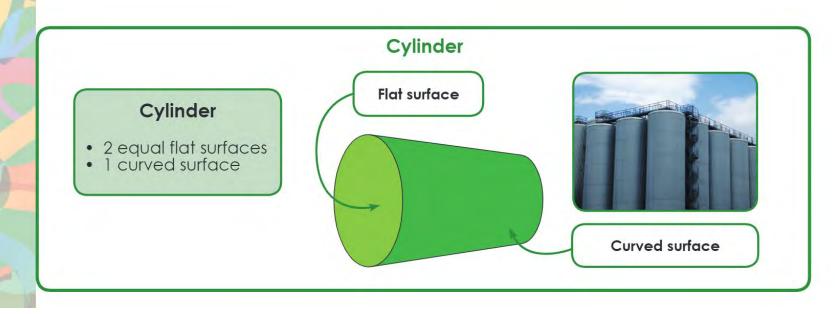




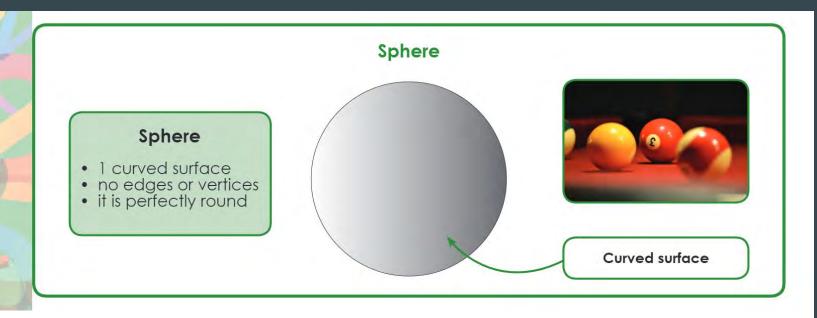
Find some everyday objects around your home or any objects that you can think of that are pyramids. List them in the pink box below.



Find some everyday objects around your home or any objects that you can think of that are cones. List them in the pink box below.



Find some everyday objects around your home or any objects that you can think of that are cylinders. List them in the pink box below.



Find some everyday objects around your home or any objects that you can think of that are a sphere. List them in the pink box below.



Write the name to match each 3D object in the pink box. The first one is done for you.

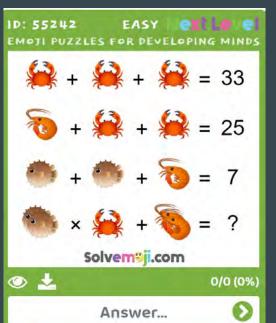
a	I have four triangular faces. I have five vertices.	I am a pyramid
b	I have one curved surface.  I have one flat surface.	I am a
c.	I have six faces. I have square faces. I have eight vertices.	I am a
d	I have one curved surface. I have two flat surfaces.	I am a
e	I have one curved surface.	I am a

# Wednesday

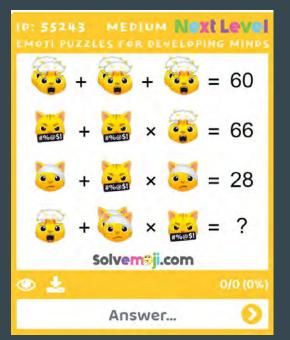
Lesson 3

### Ignition Activity 3 - choose your level













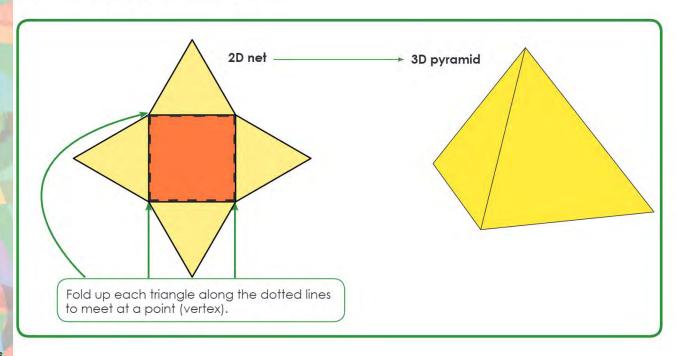


## **Exploring Nets**

This net has 4 triangles and 1 square.

You can see that the triangles on the 2D shape are all connected to the square. If you fold up each of the triangles then they would meet at a point (vertex). The square would form the base of the object.

You now have a 3D square-based pyramid.



1. You can investigate nets further by looking at boxes that are used in packaging, such as cereal, tissues or muesli bars. If you take these boxes apart then you will have a 2D net.

Look at the pictures showing how some everyday packaging that has been taken apart to form nets.



Find some example of everyday packages such as cereal boxes or tissue boxes. Take them apart so you make a 2D net and then rebuild the 3D again. You will notice that there are extra flaps on the packages that you cut of. These are put there to help the package fit together better and also to make it easier to open.

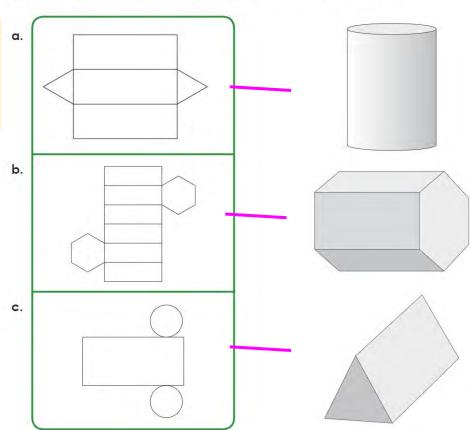
Take some photos of the different nets you found and send them to your teacher.

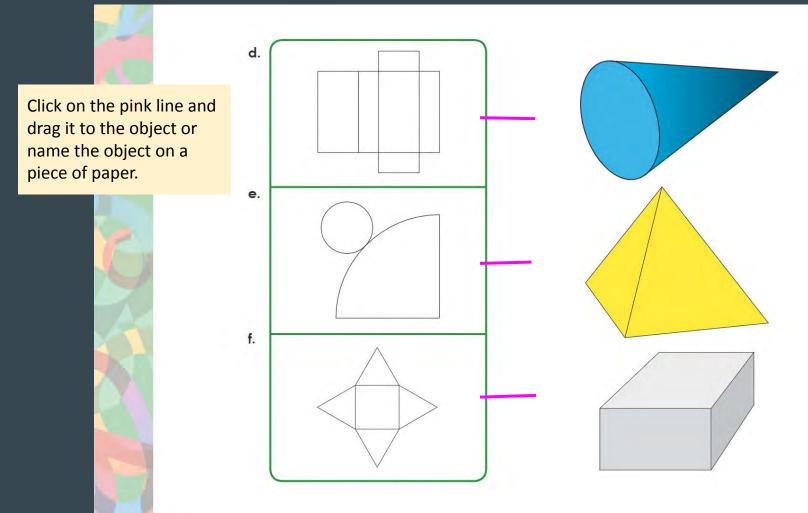
2. Match each net to th

2. Match each net to the 3D object that it makes.

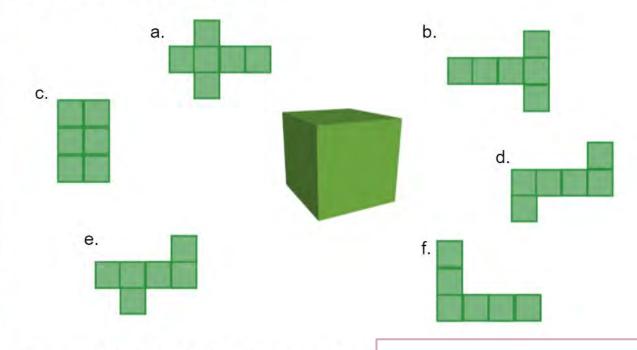
Clue: When folded, each face must be connected to at least one other face.

Click on the pink line and drag it to the object or name the object on a piece of paper.





3. For some 3D objects there is more than one way to make a net. Look at the 6 different nets below.



List the nets that you think will make a cube?

How did you work out which nets would make a cube?

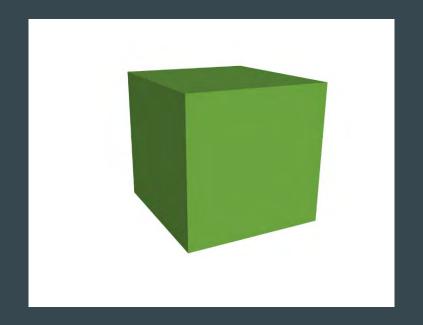
Answer this in the pink text box

### **Drawing Nets - Cube Challenge**

There are 11 nets for a cube.

You have already found some in the previous activity, can you find the rest?

Use a piece of paper to draw other nets.

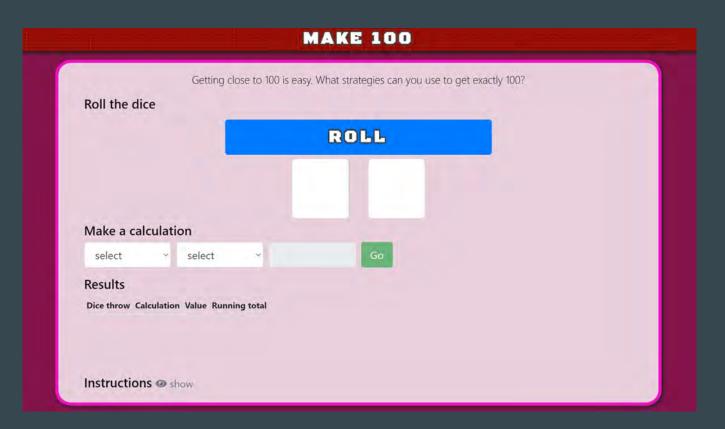


# Thursday

Lesson 4

### **Ignition Activity 4 – Make 100**

Click on the picture to play the game online. Snip your results and paste it on this slide.

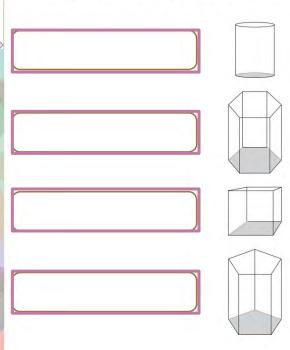


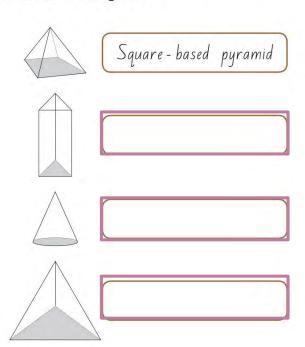
1. All three-dimensional objects have surfaces that are curved, flat or a combination of both.

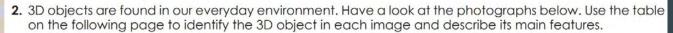
We abbreviate the words three-dimensional by writing 3D.

Type your answers in the pink text boxes

Think back to what you have previously learnt to help you identify each 3D object. Look at the collection of 3D objects below. Write the names of each object in the boxes next to the diagram.







a.



C.



e.



b.



d



f.





h.



1



k.



i



Using the photographs on the previous two slides, complete the table. Some sections have been filled in for you. *Click and type into the table or write your answers in a workbook or piece of paper.* 

Image	3D Object	Features
a.	rectangular prism	6 rectangular faces, 8 vertices, 12 edges
b.		
C.		
d.		
e.		6 square faces, 8 vertices, 12 edges
f.		
g.		
h.	square-based pyramid	
i.		
j.		
k.		2 equal flat surfaces with circular boundaries, 1 curved surface

I have 1 curved surface.  I have no edges or vertices.	I am a .	← Answer this in the pink tex boxes
I have two equal triangular faces. I have 3 rectangular faces. I have 6 vertices.	I am a	
I have 4 triangular faces. I have 4 vertices.	I am a	
I have two equal flat surfaces.  I have one curved surface.	I am a	

# Friday

Lesson 5

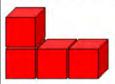
### **Ignition Activity 5 – The Third Dimension**

If you need dot paper, click here.

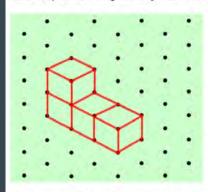
### The Third Dimension

Age 5 to 11 Challenge Level \*\*\*

Here are four cubes joined together:



We can draw this arrangement of cubes on dotty paper (isometric paper) which gives us a way of drawing 3D objects more easily:



How many other arrangements of four cubes can you find? Can you draw them on dotty paper? It's more difficult than it looks! Answer this in the pink text boxes or in a workbook or piece of paper.

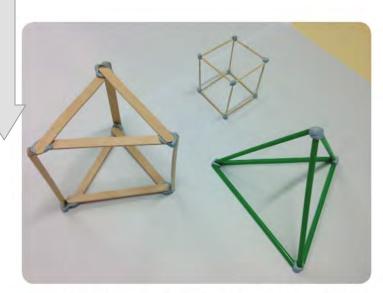
Here are some examples of 3D objects that have been constructed using different materials.

1. What 3D objects have been constructed in the photograph?

The paddle pop sticks have been used to build a:

The straws have been used to build a:

The **toothpicks** have been used to build a:



Note: the materials above have been joined using Blu-Tack

### 3D Object Building Challenge

- Have a hunt to see if you can find materials such as toothpicks, straws, paddle pop sticks or paper that you could use to build your models.
- You will need to find something to stick the materials together. You could use Blu-Tack, plasticine, tape or even partly-cooked chickpeas to join the edges together.
- Look at the 3D objects on the other slides to guide your construction.
- You can take a photo of your model and share it with your teacher or insert a slide and write a description of your model.



#### Top Tip

Think about the number of vertices and edges and also the length of edges when working out how to construct your model.

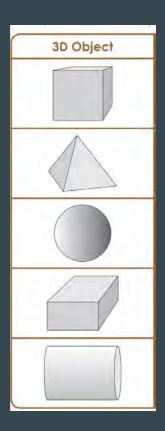
### 3D Object Drawing Challenge



Here is a triangular prism. If you **view** the prism directly from the top, you will see the outline of the rectangular bottom face. The front view shows the shape of the triangular base. The side view shows the shape of the rectangular side face.

3D Object	Top View	Front View	Side View
top view side view front view			

### 3D Object Drawing Challenge



For this challenge you can use a workbook, piece of paper or insert a slide and use the 'insert' shapes function. Choose whichever is works best for you.

- For each 3D object draw the:
  - top view
  - front view
  - side view
- You can take a photo of your drawings to share or keep them to show your teacher.

# Investigatio Mathematics

### Optional Weekly Challenge

### MAGICAL nathenatics



You will need: Pencil and paper

- Refer to the magic square example. Add the rows. Add the columns. What did you notice? Write it down.
- 2. Add the diagonals. What did you notice?
- Create your own 3 x 3 magic square. The columns, rows and diagonals should equal the same amount.
- 4. Using the example magic square and your magic square, add them together. Do this by adding the same numbers that have the same position. Produce a new square as your answer.
- 5. You now have a new square. What do you notice about this square?
- Extension: create a magic square using fractions or decimals.

### **Want more Maths?**

You can also go onto Mangahigh or Studyladder

Ask your teacher if you need your login details.





### Answer your Questacon questions here:

### Let's Visit: The Australian Institute of Sport

Click on the image of the Institute of Sport to watch the introductory video. then answer the following questions:



What is your favourite sport and why?

If you could go to the 2032 Olympics in Brisbane and represent your country in any event, what would that event be?

Could you train at the AIS for this event? Why or why not?

### The Australian Institute of Sport

Now <u>CLICK HERE</u> to explore the 'Healthy Kids' site from the Australian Institute of Sport.

Complete ONE of these allocated tasks of your choice.

AIS Sport Oval Section: Click on 'I Can Do That' (Activity 6) and complete the task.

Games Room Section: Click on 'This is Me' (Activity 1) and complete the task.

Community Garden: Click on 'Pollinator Garden' (Activity 2) and complete the task.

Canteen: Click on 'Hydration Station' (Activity 2) and complete the task.

Extension: Complete the 'Design Your Own Athlete Village' Challenge.



Complete your activity here.	Take photos of your project	and share these as well.

### Let's Visit: The War Memorial



### Write your war description here:





### Welcome to the National Dinosaur Museum

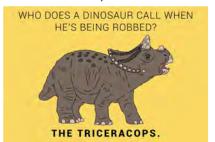
- 1. Click on the Tyrannosaurus Rex for your virtual tour of the museum.
- 2. Now watch the following video link to hear some great facts on the history of dinosaurs.

https://www.youtube.com/watch?v=KfsYD2O3QVc

Select your favourite dinosaur.

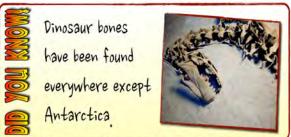
Write 10 Fascinating Facts about your dinosaur and present it in a ROARSOME interactive poster on the next slide.

Use pictures, colour and other engaging tools like video links and moving graphics.



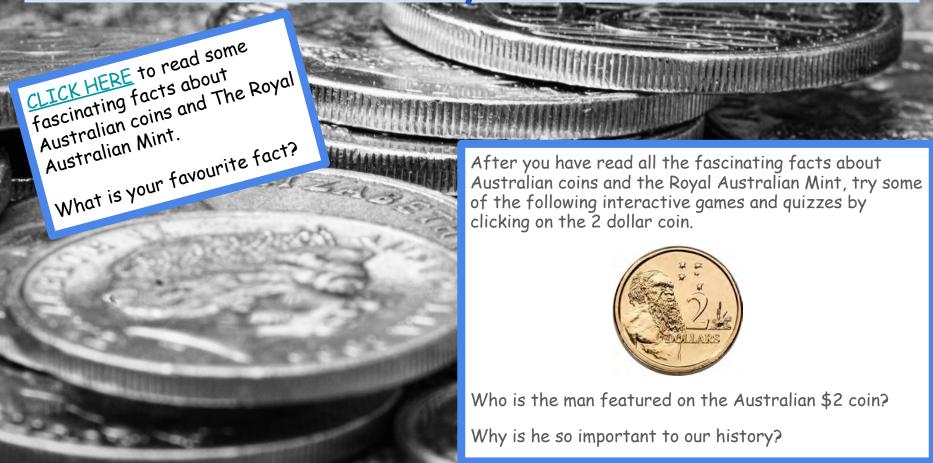








### Let's Visit: The Royal Australian Mint



## Answer the Mint questions here:



## Show your artwork here:



## Erina Heights Public School Learning from Home - Stage 2

Term	1	2	3	4							
Weeks	1	2	3	4	5	6	7	8	9	10	11

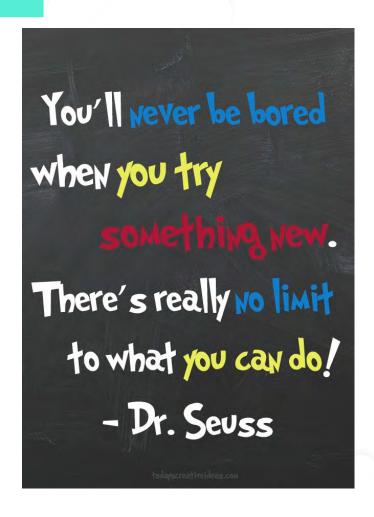
	Monday	Tuesday	Wednesday	Thursday	Friday			
9:00	Daily Zoom Meeting	2/3L Zoom link	3A Zoom Link	3/4C Zoom Link	3/4C Zoom Link			
Morning	Literacy Activities	Literacy Activities	Literacy Activities	Literacy Activities	Literacy Activities			
	Recess Break							
	Maths Activities Fractions & Decimals	<b>Maths Activities</b> Fractions & Decimals	<b>Maths Activities</b> Fractions & Decimals	<b>Maths Activities</b> Fractions & Decimals	Maths Activities Fractions & Decimals			
Middle	Manga High	Manga High	Manga High	Manga High	Manga High			
	Lunch Break							
Afternoon	A Week of STEM	A Week of STEM	A Week of STEM	A Week of STEM	A Week of STEM			
Optional Activities	)							



## EXPECTATIONS

## 'Strive for progress, not perfection'

- Do one activity each day.
- If you get stuck, send your teacher a message on Google Classroom.
- You can add extra slides to do your answers, otherwise you can do your work in a Google doc or workbook at home.
- Submit your work on Google Classroom.
- Do the best you can! 😌



# KIDS NEWS

## Plastics a major danger to our green and loggerhead turtles

https://www.kidsnews.com.au/animals/plastics-a-major-danger-to-our-green-and-loggerhead-turtles/news-story/635107c1cd6b369681f21d62e7d0b217

#### What to do?

• Scan the QR code or click the link above to be taken to the website.

#### Answer these questions on the next slide:

- What percentage of loggerhead turtles had ingested plastics off the Queensland coast?
- Which turtles are thought to be most at risk and why?
- How many marine species are estimated to have interacted with plastics?
- One turtle off the Indian Ocean was found containing how many pieces of plastic?
- What kind of plastic was more commonly found in the Pacific Island turtles?

#### **Extension**

How can you reduce plastic waste polluting our oceans. Answer this on slide 5.





# KIDS NEWS

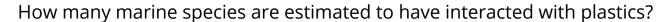
## Plastics a major danger to our green and loggerhead turtles

What percentage of loggerhead turtles had ingested plastics off the Queensland coast?

<Type>

Which turtles are thought to be most at risk and why?

<Type>



<Type>

One turtle off the Indian Ocean was found containing how many pieces of plastic?

<Type>

What kind of plastic was more commonly found in the Pacific Island turtles?

<Type>



# KIDS NEWS

## What can you do to reduce plastic waste in our oceans?

Think of five big ideas for reducing the plastic waste polluting our oceans and record them in the first column below. In the second column, pretend you are in government and explain how you would implement these actions. There is an example done for you.

Ways to reduce plastic waste.	What would I do if I were in government to implement this action.
Use biodegradable packaging for foods at takeaway cafes at surf clubs. No plastic to be used.	Make it a law that surf club takeaways are only allowed to use biodegradable packaging for their takeaway items.

# VOCABULARY

## Definitions, Synonyms & Antonyms

Complete the table below. Do not copy and paste the definition, it **MUST** be in your own words.

Word	Definition	Two Synonyms	One Antonym
Enemy		1. 2.	1.
Disagree		1. 2.	1.
Crowd		1. 2.	1.
Common		1. 2.	1.
Obvious		1. 2.	1.
Misfortune		1. 2.	1.





# LITERACY GAMES

Practise your reading and typing skills - 20 minutes.

### Click the images to access the games.



In this game you need to read the text in the cloud and then work out which tree has the correct main idea.



To play this game, you need to read the sentence at the top of the screen and then grab any supporting evidence in the game. You press 'g' to grab the evidence.



This is a typing practise game. You type the words as quickly as you can to beat your opponent.

# WRITING TASK - Idioms

An idiom is a word or phrase which means something different from its literal meaning.

#### For example:

- She spilled the beans
- Once in a blue moon



#### Your Task:

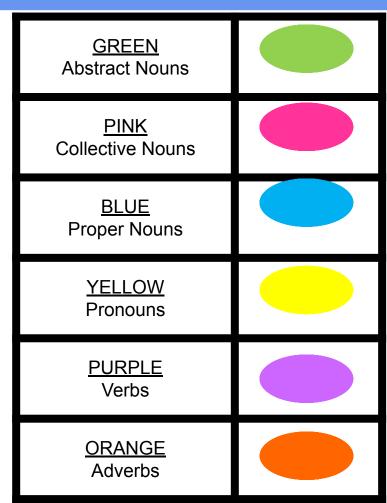
Find the meanings of the following idioms. You may research their meanings on the internet.

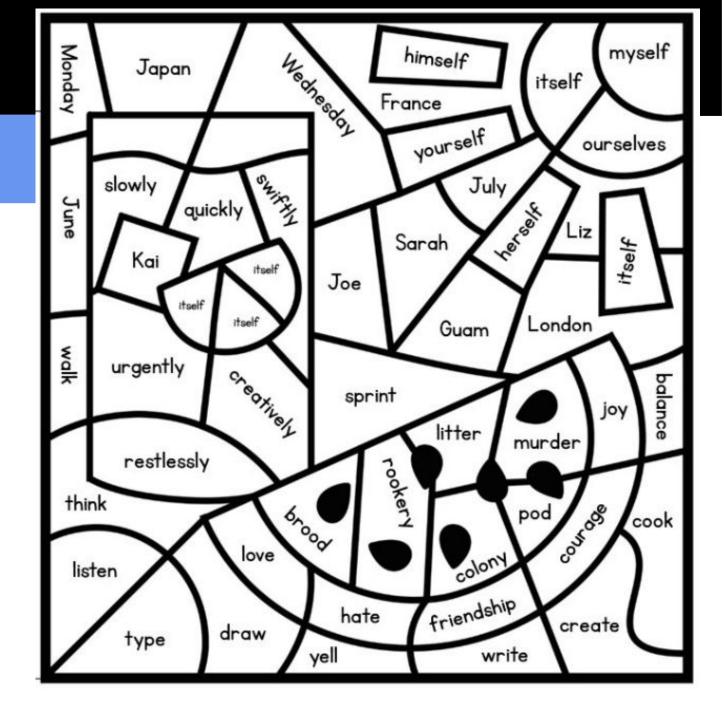
Idiom	Meaning
Eats like a bird	
She let the cat out of the bag	
When pigs fly	
I'm on top of the world	
It's a piece of cake	
I smell a rat	
Back to the drawing board	

# GRAMMAR

use the code to colour the picture. You can drag and drop the colours onto the picture.

Tip: When you drag and drop the colours, they won't fill the shape but that is ok. It will be like putting a coloured counter on the words.





# Maths

•••

Stage 2 - Week 7

## Maths Instructions

- 1. Watch the instructional videos before beginning the tasks. You may need to watch these more than once.
- 2. Complete 1 or both activities each day activities should be completed on paper or in a book. Please draw any tables or diagrams that you need to complete these activities.
- 3. To make answering easier, can you please add a text box over the space for the answer which will allow you to edit the slide.

# Practise your multiplication tables









# **PLEASE NOTE**

If it is easier for you to complete this work in a book, then please do so and send a photo to your teacher or submit on Google Classroom if you know how.

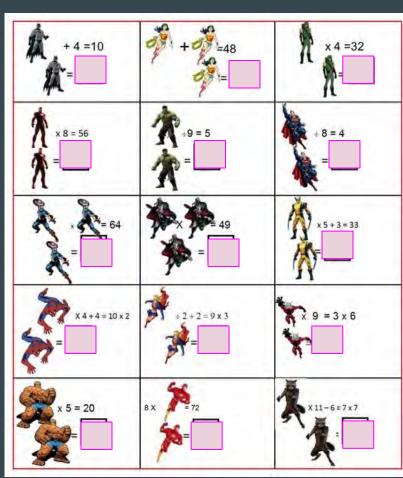
Otherwise - Click on the pink text boxes on the activity slides to enter your answer.

# Monday

Lesson 1

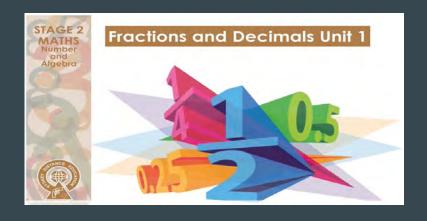
## Ignition Activity 1

Double click on the pink text boxes to write your answers.



### **Instructional Video Links -** Click the links below to access the videos





Fractions and Decimals Unit 1

**Fractions and Decimals Unit 2** 

## Glossary

- denominator: the bottom number in a fraction showing the number of parts the whole or collection
  is divided into
- fraction: a part of a number consisting of a numerator (top number) and denominator (bottom number)
- · numerator: the top number in a fraction; the number of parts of the whole
- . unit fraction: one equal part of the whole; a fraction with a numerator of 1



When we divide a number, an object or a collection of objects into equal parts, we call each part a fraction.

Look at the square above.

The square has been divided into

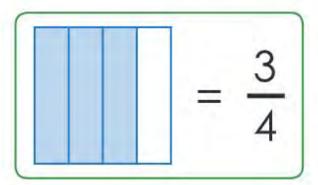
There are 3 parts of the square

Look at the square above. It is 1 whole square, The square has been divided into 4 equal parts.

There are 3 parts of the square shaded. This means 3 parts out of the whole are shaded.



The fraction which shows the number of parts shaded out of the whole square is written as:



A fraction is made up of a numerator and a denominator.



The number on the top of a fraction is known as the **numerator**. This fraction shows that we are looking at 3 parts of the whole.



The number on the bottom of a fraction is known as the **denominator**. This fraction shows that the whole square is divided into 4 equal parts.



An important point to remember is that parts of a whole are only described as fractions if they are equal in size.

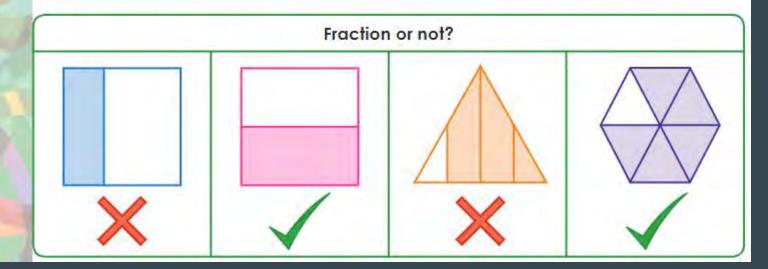
#### Fraction

one or more parts of a whole or a collection of objects where the parts are equal



If parts are not equal then it is not a fraction.

Look at these shapes. Each shape has been divided into smaller parts. The shapes that have been divided into equal parts, or a fraction, are marked with a tick. The shapes that have been divided into unequal parts are marked with a cross.

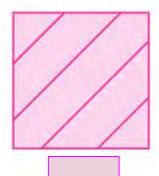


Complete
this activity
in a
workbook or
whiteboard
at home and
put your
answers in
the text
boxes.

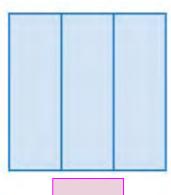
Double click on the pink text boxes to write your answers. Look at the shapes below. Are the parts equal in size? Write 'yes' or 'no' under the shape. The first one has been done for you.
 Answer these questions in the pink text boxes

a.

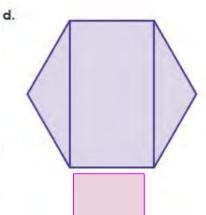
b.



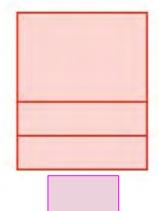
C



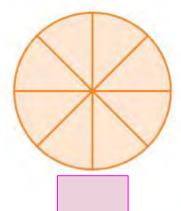
no



0

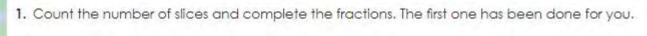


f.

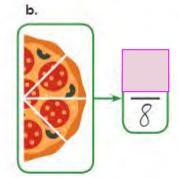


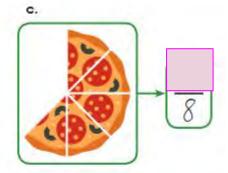
Fractions on Decimals

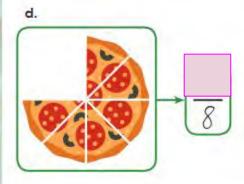
Double click on the pink text boxes to write your answers.

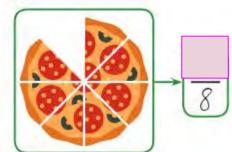


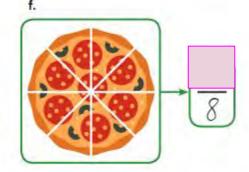


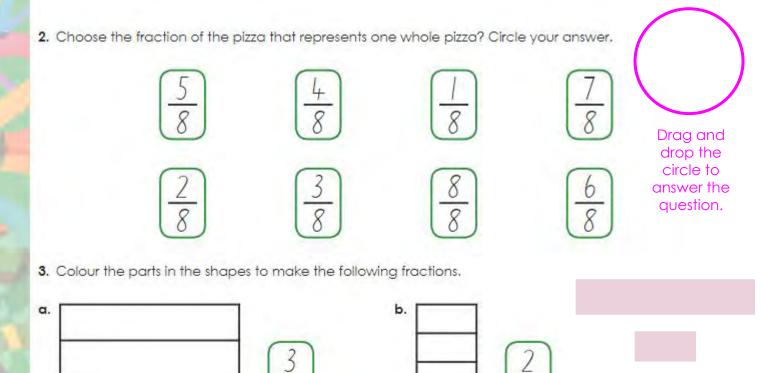












Drag and drop the shapes above to colour the fractions.

#### Challenge activity

Create your own fractions with everyday objects.

#### You will need:

Objects around your home that you can divide into parts of a whole or parts of a collection.

Some suggestions are:

paper plates, lollies of different colours, piece of paper, fruit, pencils

#### What you need to do

- · Take a photo of the object or collection.
- · Create fractions that have denominators with the numbers 2, 3, 4, 5, 8.
- Create different fractions by showing how many parts there are in relation to the whole or collection.
- If you are making a fraction of a collection, you could make the fraction based on the different colours of objects in your collection.

Use the outline on the following page to record your fractions or present them in a computer program of your choice.

Double click on the pink text boxes to write your answers.

Fraction Count Chart					
Object or collection	Photo or drawing	Description of fractions			
Example:  A collection of different flavoured macaroons for afternoon tea.		$\frac{2}{3}$ of the macaroons are lemon flavour, $\frac{1}{3}$ are green tea flavour			
and als					

# Tuesday

Lesson 2

## **Ignition Activity 2**

Double click on the pink text boxes to write your answers.

#### Pokemon Go: Combat Points



or10	⇒102	⊕116
Speakow	Squirtle	Sourtle
cx38	cs/99 Venorial	⊕103 Erwe
o-24	p-69	1914
Careron	Pidger	Nelgentto

Order the Pokemon from highest to lowest in this table:



	1 11 11 11 11	
1		
1		
- 1		

Name

CP

What is the difference in CP between the highest and the lowest number?

What is the difference in CP points between the two 'Squirtles'?

What is the difference in CP points between the two 'Pidgeys'?

Which two Pokemon would have the greatest CP points?

Which two Pokemon would have the lowest CP points?

I need exactly 290 CP points to win my next Pokemon battle, which two Pokemon do I

choose?



Vorkings Box:			
Anteniës Mas-			





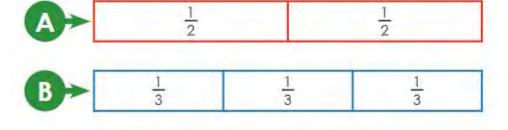
In this lesson you will be comparing fractions and solving word problems using your knowledge of fractions.

#### Have A Go!

A unit fraction is 1 equal part of the whole. The numerator in a unit fraction is always 1.

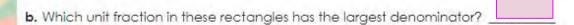


Unit fractions can be compared to see which one is larger or smaller. Compare the unit fractions of the three rectangles below.



Double click on the pink text boxes and write your answers

- 1. Answer the questions that follow by comparing the fractions in A, B, and C on the previous page.
- a. In which rectangle (A, B or C) are the fractional parts larger?



c. Does the unit fraction with the largest denominator represent the smallest or largest fractional part? Explain,

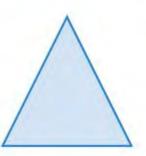


Cool Clue: The more parts that a whole is divided into the smaller each fractional part is.

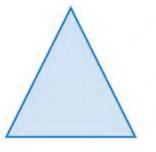
Practions on Decimals Unit 1 Double click on the pink text boxes and write your answers

2. Look at the four triangles below.

What fraction of the triangles are red? We would say 'one out of four', 'one-quarter', or we could write  $\frac{1}{4}$ .

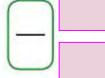




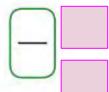




a. Write the fraction of the triangles that are green.



b. Write the fraction of the triangles that are blue.



Double click on the pink text boxes and write your answers

3. Ruby and her friends played a trivia game. There were 5 questions. A lollipop was given to the person who was the first one to answer a question correctly. Look at how many lollipops each girl won.

Lola has two lollipops.



Maggie has two lollipops.



Ruby has one lollipop.

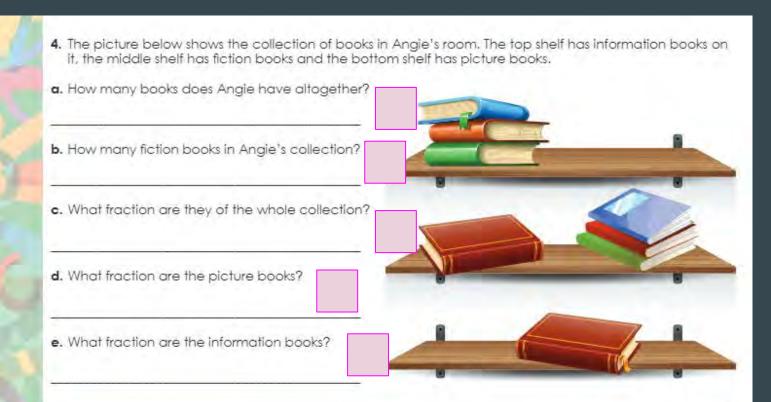


a. What fraction of the questions did Lola answer correctly?



c. What fraction of the questions did Ruby answer correctly?

Double click on the pink text boxes and write your answers

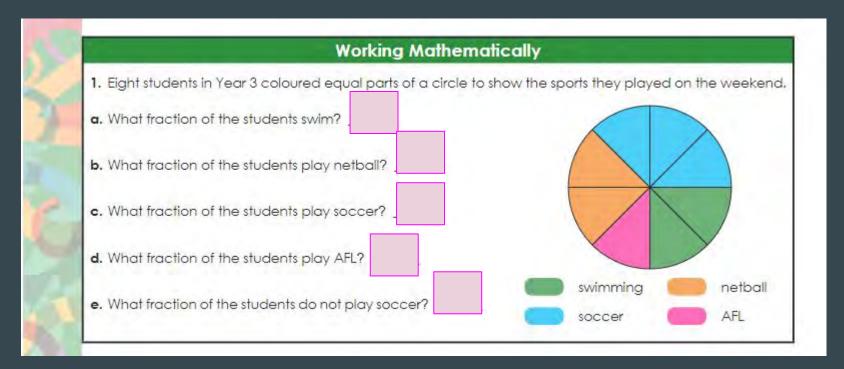


## Extra Challenge

- 5. Angle donated three of her fiction books to the school fair. What would be the new fraction of the collection for:
- a. information books?

b. fiction books?

c. picture books?

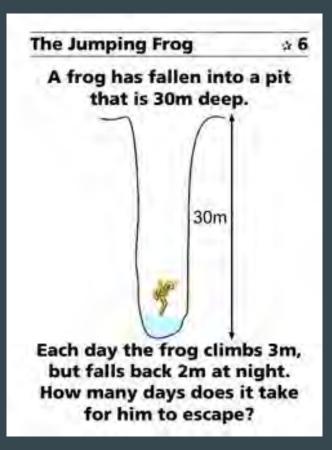


Write an explanation of the strategy you used to answer the questions in the pink box below. TIP: Use some of the words from the glossary at the beginning of these slides.

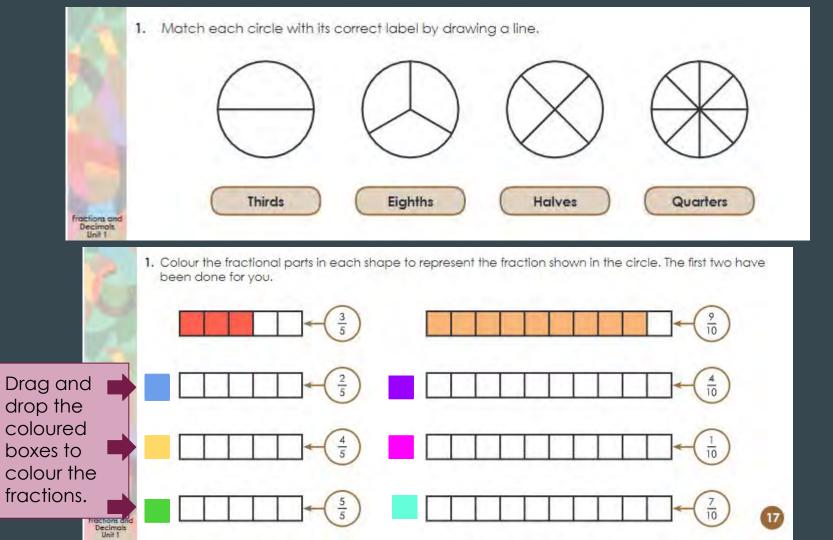
# Wednesday

Lesson 3

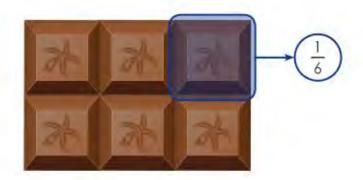
# Ignition Activity 3



Working Out:

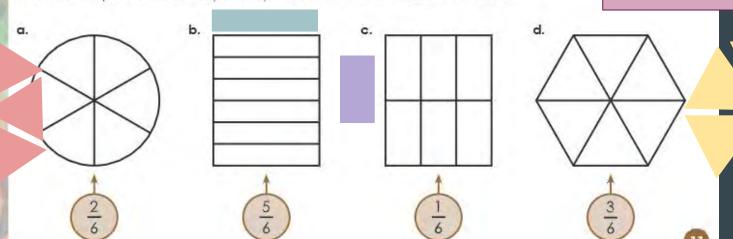


Look at the chocolate bar below. It is divided into 6 equal parts, and each part is **one-sixth** of the whole chocolate bar.

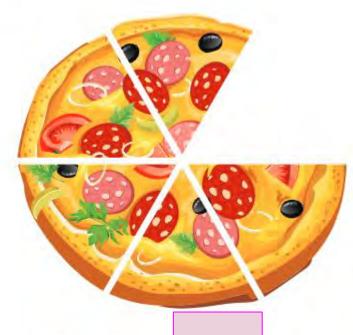


Drag and drop the coloured shapes to colour the fractions.

3. Shade the parts of each shape to represent the fraction shown in the circle.



4. Look at the pizza below.



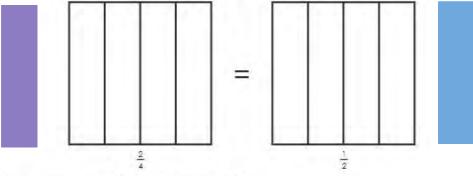
a. What fraction of the pizza has been eaten?

b. If three more slices were eaten what fraction of the pizza would be eaten?

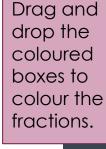
c. If you finished the whole pizza, what fraction has been eaten?

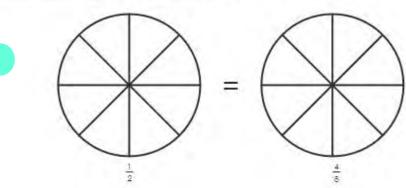
An equivalent fraction has the same value as another fraction, despite usually having different numerators and denominators, e.g.  $\frac{1}{2}$  and  $\frac{4}{8}$  are equivalent fractions.

1. The squares below are divided into quarters. Shade the squares to show that  $\frac{2}{4}$  is equivalent to  $\frac{1}{2}$ .

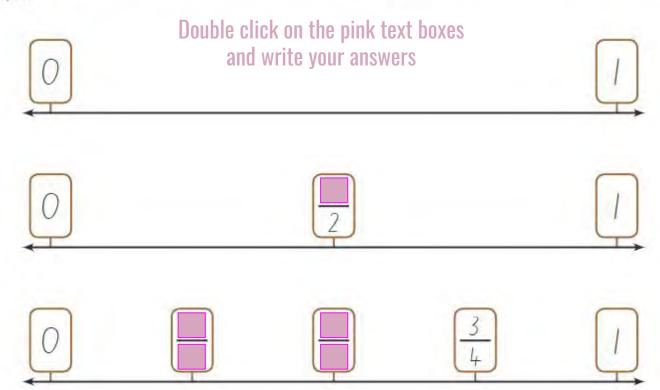


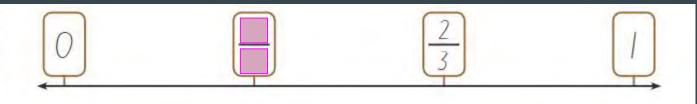
2. Shade the circles to show that  $\frac{1}{2}$  is equivalent to  $\frac{4}{8}$ .

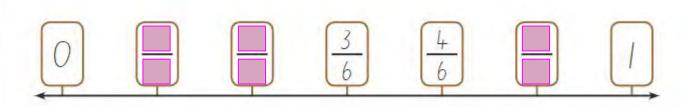




- When completed, these number lines show how different fractions can be equivalent to each other. If two fractions are in the same place on the number line, then they are equivalent.
- · Fill in the missing fractions on the number lines.
- Use the missing fractions to show the equivalent fractions in letters a to d. The first one has been done for
  you.







a. 
$$\frac{2}{3} = \frac{4}{6}$$

b. 
$$\frac{3}{6}$$
 =  $\frac{2}{2}$ 

$$\begin{bmatrix} \frac{1}{3} \end{bmatrix} = \begin{bmatrix} \frac{1}{6} \end{bmatrix}$$

$$d. \left(\frac{1}{2}\right) = \left(\frac{1}{4}\right)$$

# Thursday

Lesson 4

# **Ignition Activity 4**

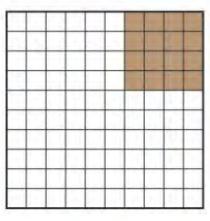
Start at the bottom left square and move up, down, left or right until you reach the finish.

	4	9	7	7	4	Finish
	8	9	4	5	7	
	6	6	4	9	9	
	7	8	8	8	6	
Start 🗘	5	5	6	5	5	

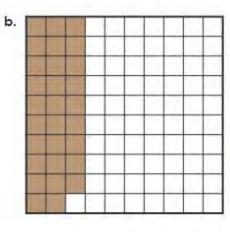
Add the numbers as you go. Can you make exactly 53? Working Out:

2. For each MAB flat, write the fraction represented by the shaded squares in the box.

a.

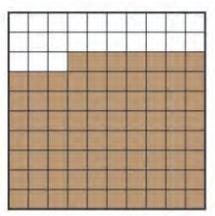


Fraction



Fraction

C.

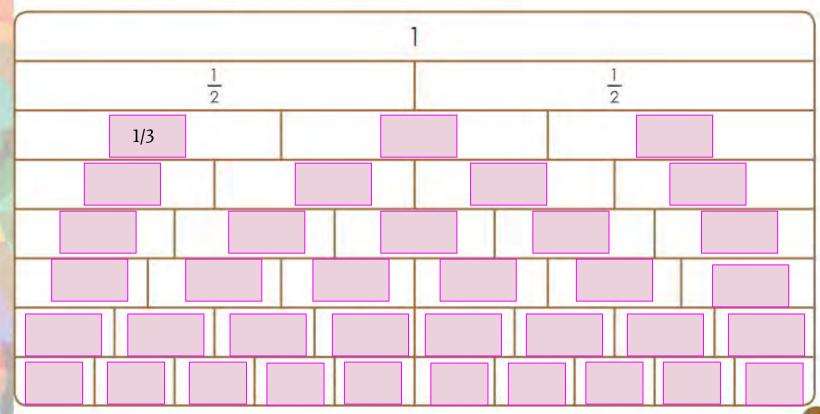


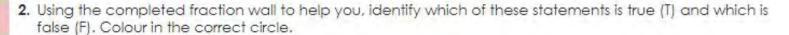
Fraction



Fraction

1. Fill in the fraction wall. The first two rows have been done for you.





**a.** Two-quarters  $(\frac{2}{4})$  is equivalent to one-half  $(\frac{1}{2})$ .

(T) (F)

**b.** Four-sixths  $(\frac{4}{3})$  is equivalent to two-thirds  $(\frac{2}{3})$ .

T F

**c.** Three-fifths  $(\frac{3}{5})$  is equal to eight-tenths  $(\frac{8}{10})$ .

(T) (F)

**d.** One-fifth  $(\frac{1}{5})$  is half of one-tenth  $(\frac{1}{10})$ .

T F

**e.** One-eighth  $(\frac{1}{8})$  is half of one-quarter  $(\frac{1}{4})$ .

(T) (F)

**f.** One-sixth  $(\frac{1}{4})$  is half of one-third  $(\frac{1}{3})$ .

(T) (F)

**g.** One-third  $(\frac{1}{2})$  is half of one-sixth  $(\frac{1}{4})$ .

1 (

(T) (F)

**h.** One-tenth  $(\frac{1}{10})$  is half of one-fifth  $(\frac{1}{5})$ .

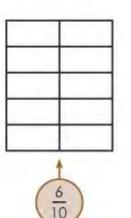
(T) (F)

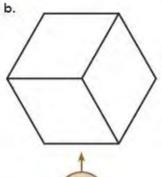
i. One-tenth  $(\frac{1}{10})$  is double one-fifth  $(\frac{1}{5})$ .

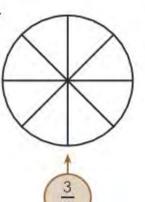
Drag and drop the coloured circles to highlight the correct answer

3. Shade the parts of each shape to represent the fraction shown in the circle.

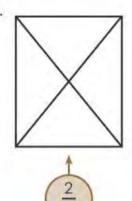
a.





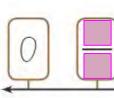


d.



4. Fill in the missing fractions on these number lines.

a.















b.













# Friday

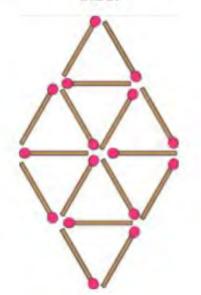
Lesson 5

# Ignition Activity 5

## **Missing Matches**

\$ 5

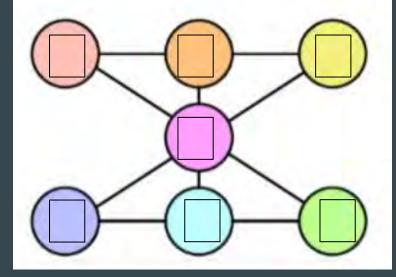
Remove just 4 matches to leave 4 equilateral triangles – they must be all the same size.



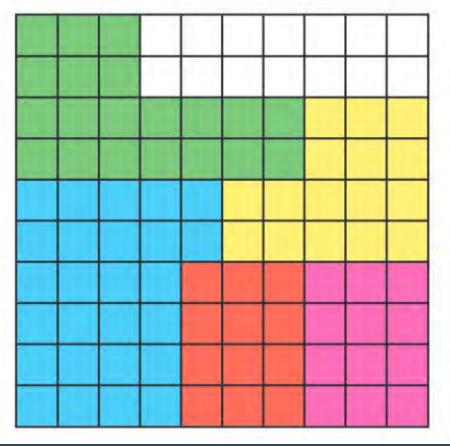
## **Number Lines 1**

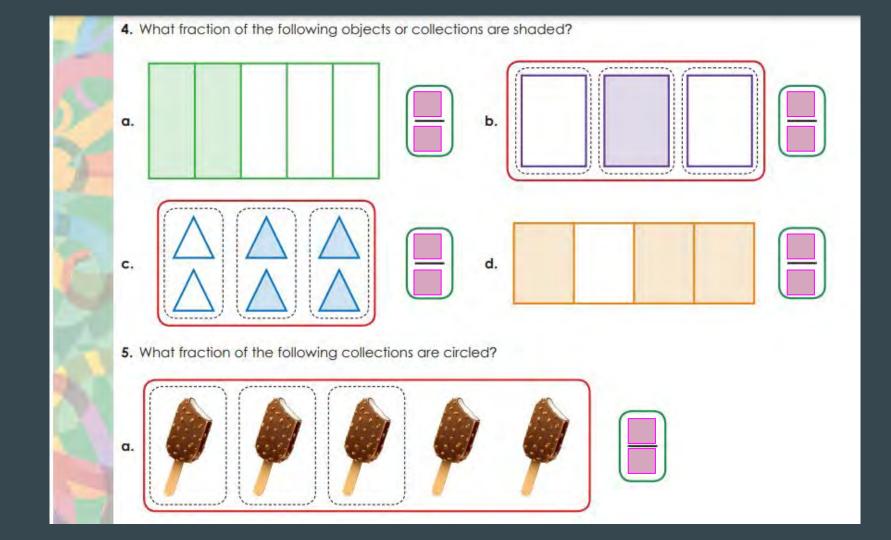
केले 13

Can you put the numbers 1 to 7 in each circle so that the total of every line is 12?



5. Write each fraction that is coloured on this 100 square.





1. Solve the word problems below using the number lines on this page.

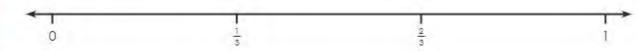
Viva Cinemas has three cinemas all the same size. On Monday evening the staff were showing three different movies in each cinema. Cinema 1 showed "The Owling" which was one-quarter full compared to Cinema 2 showing" Lord of the Owls" which was one-third full. Cinema 3 screened "Owl Capone" which was one-fifth full.

Which cinema had the most people? Which cinema had the least people?

### Cinema 1



#### Cinema 2



### Cinema 3



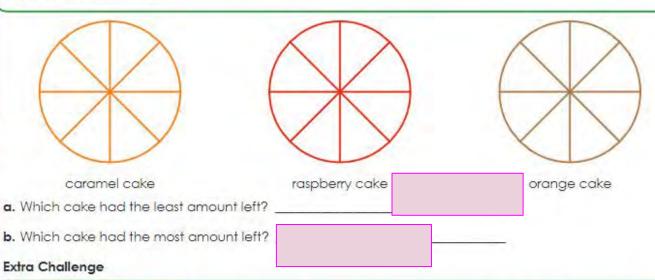
a. Which cinema had the most people?

b. Which cinema had the least people?

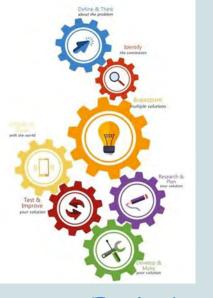
2. Solve the word problem below using the diagrams.

There were three cakes at the class party. At the end of the party, one-quarter of the caramel cake was left. One-eighth of the raspberry cake remained and half of the orange cake was left.

Which cake had the least amount left? Which cake had the most amount left? Colour in the diagrams to help you find the answers.



George has a two and three-quarter litre container. How many cups can he use to fill the container if each cup holds one-quarter of a litre? Use the number line to help you.





- Each day you will be asked to complete a new STEM challenge.
- Please complete the questions and share a picture of your project each day in the space provided.
- If you do not like the daily challenge, or do not have the required materials, you can choose one from another day, or from the grid on the final slide.

## HAVE FUN!

## STEM CHALLENGE 1: Create an apple boat



What is a boat? Write a definition.



Take an apple and a bowl of water. Do you think the apple will float or sink? Why or Why Not?

Does an apple float?

## Can you build a boat made out of one apple?

What problems might you have in completing this challenge? Eg: do you have all the equipment? What could you use instead?

What You Need:

- An apple
- Bowl of water
- Toothpicks
- Plastic knife
- A lego man or small figurine

Brainstorm 3 ways you could complete this challenge:

- 1.
- 2.
- 3.

Research and Plan here: What do you need to know about boats and what do you need to think about before starting?

## My STEM Process:

Develop and Make: come up with a apple structure that will not only float in the water, but one that you can place a lego person on top of and it will not fall off. The structure has to be stable.

Was your project successful? Why? Why Not?

What would you do differently next time?

What did you learn before, during and after this challenge?

What skills do you have that you used in this challenge?

## Photo of my Project

## STEM CHALLENGE 2: Spaghetti Tower



What is a tower? Write a definition.

What features do all tall towers have in common?



Can you build a tall tower made out of spaghetti? What problems might you have in completing this challenge? Eg: the spaghetti might break easily? How could you overcome this?

Brainstorm 3 ways you could complete this challenge:

Research and Plan here: What do you need to know about towers and what do you need to think about before starting?

## What You Need:

- Spaghetti
- A long piece of thread or thin string
- tape
- A lego man or small figurine

## My STEM Process:

**Develop and Make:** The goal is to see how tall you can build a Spaghetti tower using only spaghetti, tape, and thread. But, there is a twist. This tower also has to support the weight of a LEGO minifigure!

Was your project successful? Why? Why Not?

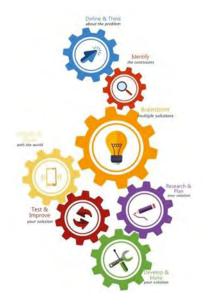
What would you do differently next time?

What did you learn before, during and after this challenge?

What skills do you have that you used in this challenge?

## Photo of my Project

## STEM CHALLENGE 3: Build a Bridge



What is a bridge? Write a definition.

What features do bridges need in order to support weight?



## Can you build a bridge that will support a single can of food?

What problems might you have in completing this challenge? Eg: different materials around the house might work better than others.

Brainstorm 3 ways you could complete this challenge:

- 1.
- 2.
- 3

Research and Plan here: What do you need to know about bridges and what do you need to think about before starting?

### What You Need:

- A can of food
- Any materials you like: lego blocks, cardboard, duplo, wooden blocks etc.

## My STEM Process:

Develop and Make: Can you create a stable bridge that includes an innovative design? This tower also has to support the weight of a can of food.

Was your project successful? Why? Why Not?

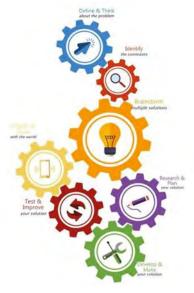
What would you do differently next time?

What did you learn before, during and after this challenge?

What skills do you have that you used in this challenge?

## Photo of my Project

# STEM CHALLENGE 4: Egg Drop Challenge



What is an egg? Write a definition.

What about an egg makes it so fragile?



Can you construct a container that will support a egg when dropped from a height? What problems might you have in completing this challenge? Eg: do you have the materials you need to fully protect your egg?

Brainstorm 3 ways you could complete this challenge:

- What You Need:
  - eggs
  - various containers and padding: You can use bubble wrap, cotton balls, tissues, plastic food containers, string, tape, plastic bags, cardboard, straws, tape
- 1. 2.
- 3.

Research and Plan here: What do you need to know about eggs and what do you need to think about before starting?

## My STEM Process:

Develop and Make: Can you create a container that will support an egg when dropped from a height of at least 2 metres high? Your container cannot be wider or higher than 10cm.

Was your project successful? (did the egg break?) Why? Why Not?

What would you do differently next time?

What did you learn before, during and after this challenge?

What skills do you have that you used in this challenge?

## Share a Photo or Video of my Project

## STEM CHALLENGE 5: Free Choice!

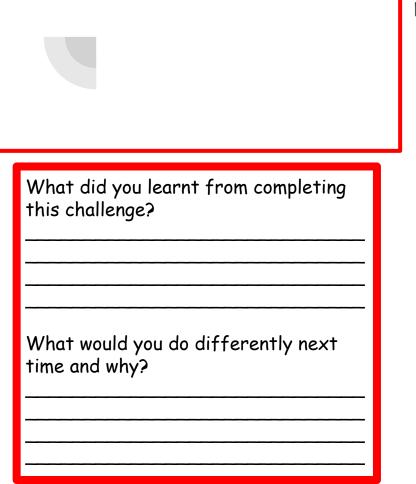
Choose the task that interests you most and share your results on the next slide.

Stage 2

Create Monday	Science Tuesday	Artive Wednesday	Engineering Thursday	Fun Friday
Create your personal mission patch! In a large circle, draw (or use clippings) to represent things you are passionate about.	Scientist want to understand the world around us. Write 5 WHY or WHAT questions to learn more about something in nature.	Create an obstacle course. Get a family member to try! What is the shortest amount of time it takes to get through the course?	Engineers solve problems to improve our lives. Brainstorm an invention that can improve your life. Draw how it will work.	Make leaf art! Place a leaf under a sheet of paper and rub a crayon over the leaf to reveal its print.
Create a skit or poster on the importance of hand washing and how to do it properly.	Which is the best invisible ink? Write 3 messages using mik, lemon juice, and vinegar. Allow to dry, Heat up the paper with a blow dryer to see message appear.	Play some basketball (or trash can ball)! Measure how many baskets you make out of 10.	Design and build a table using only newspaper or paper and tape. How much weight can it hold? How can you make it stronger?	Host a paper airplane contest.
With the help of an adult, cook lunch or dinner. Measure out the ingredients. How would you double or halve the recipe?	Place a small ball on top of a large ball and drop them together. Watch how energy is transferred!	Find a quiet place in nature. Bring a journal and record everything you see.	Design and build a catapult with household item to knock over a tower of cups.	Use a small bag of candles like MfxMs, find the ratio of each colour to the total candles in the bag.
Make a greeting card using 3D pop up art.	Find a leaf on a plant, wrap it in a plastic bag and secure it with a rubber band. After a few hours water will appear! This is the plants version of sweating.	Go outside and record as many different insects and mammals as possible.	Design and build a roller coaster from paper, paper plates, and tape. How long can you keep a ping pong ball moving?	Draw or write a story about your ideal vacation.
Create a hoop glider using a straw and paper. How far can you make it go?	Take a pencil and scribble in a square to create a graphite "ink pad". Press your finger in the graphite and then on a sheet of paper to look at your fingerprint!	Measure your heart beat for 10 seconds. Do jumping jacks and then measure again. What is the difference?	Create a zip line for a small action figure to travel down from at least your shoulder height.	Survey your family for these genetic traits: dimples, attached earlobes, ability to roll tongue, and right thumb goes on top when clasping hands.
Draw a robot invention. What would it do?	Go outside and write down your weather observations. What do the clouds look like? Can you tell what direction they are moving?	Create your own dance workout routine. Teach to a family member.	Imagine you only have one leg. Design a prosthetic leg using household items. Test it out! How do you make it comfortable? How would it attach to your body?	With a family member, discuss a significant historical event that happened to them. How did this event impact their life? What did they learn?

## Stage 3

Create Monday	Science Tuesday	Active Wednesday	Engineering Thursday	Fun Friday
Create your personal mission patch! In a large circle, draw (or use clippings) to represent things you are passionate about.	Scientist want to understand the world around us. Write 5 WHY or WHAT questions to learn more about something in nature:	Create an obstacle course. Calculate your average time to complete the course over a series of 5 attempts. Get a family member to try!	Engineers solve problems to improve our lives. Brainstorm an invention that can improve your life. Draw how it will work.	Draw your ideal future city. What areas will keep citizens healthy and happy? What laws will you have?
Create a skit or poster on the importance of hand washing and how to do it property.	Which is the best invisible ink? Write 3 messages using milk, lemon juice, and vinegar. Allow to dry. Heat up the paper with a blow dryer to see message appear.	Play some basketball (or trash can ball)! Measure how many baskets you make out of 10. Calculate your percentage accuracy.	Design and build a table using only newspaper or paper and tape, How much weight can it hold? How can you make it stronger?	Host a paper airplane contest.
With the help of an adult, cook lunch or dinner. Measure out the ingredients. How would you double or halve the recipe?	It, cook lunch or her. Measure out ingredients. How ald you double or Watch how energy is		Design and build a catapult with household item to knock over a tower of cups. Calculate percentage accuracy.	Use a small bag of candies like MEMs, find the ratio of each colour to the total candies in the bag.
Make a greeting card using 3D pop up art.	List 5 non-reusable items in your house. How can you make at least one of them reusable?	Go outside and record as many 10 different insects and mammals.	Design and build a roller coaster from paper, paper plates, and tape. How long can you keep a ping pong ball moving?	Draw or write a story about your ideal vacation.
Create a hoop glider using a straw and paper. How far can you make it go?	Find a quiet place in nature. Bring a journal and record everything you see.	Measure your heart beat for 10 seconds. Convert to beats per minute. Run around and then measure again. What is the percentage increase?	Create a zip line for a small action figure to travel down from at least your shoulder height. Calculate the speed (distance divided by time) of the zip line.	Survey your family for these genetic traits: dimples, attached earlobes, ability to roll tongue, and right thumb goes on top when clasping hands.
Peter Piper picked a peck of pickled peppers. Write 2 of your own tongue twisters.	The tongue map theory states that different areas of your tongue sense different tastes. Look-up this theory. Create an experiment to prove or disprove it.	Create your own dance workout routine. Teach to a family member.	Imagine you only have one leg. Design a prosthetic leg using household items. Test it out! How do you make it comfortable? How would it attach to your body?	Design a device to keep a water balloon or egg from breaking when thrown against a wall or dropped from a second story.



What Do You Need? Make a list here:

Show a picture or video of your challenge and explain the process of completing it:

# STEM Reflections

What was your favourite STEM challenge? Why?

What challenge were you most successful at? Why do you think this?

Which task did you find the most challenging? Why?

Write about ONE thing that you have learnt this week. It may be something you found out in research or something you learnt about yourself while completing these challenges.



