#### Work Packs for Year 4 week 6

Work should be completed in the book.

Work can be completed on the computer and printed out and stuck in

	Reading	Writing	Maths	Other
Day 1	Read the picture - Girl on a house on a dragon.  Answer the questions below.	Investigate the spelling rule for adding 'in-', 'il-, or 'im-' to the beginning of words.	Place value of 4 digit numbers  Don't forget you can go on Mathletics to support your understanding	Make a fitness routine and put your family through their paces.  Check on Purple Mash each day for new tasks to complete.
Day 2	Read Mary Anning (on Bug Club) Pages 1- 11) and answer the questions below.	Investigate how to find words in a dictionary using the first three letters of the word.	Comparing decimals  Don't forget you can go on Mathletics to support your understanding	Sketch something in your house/garden. Evaluate what you've drawn. If you were to do this again, what would you change?
Day 3	Read Mary Anning (Pages 12-21) and answer the questions below.	Investigate words that have their origin in Latin or Ancient Greek.	Rounding decimals  Don't forget you can go on Mathletics to support your understanding	Design your own indoor sports game. How can you make it easier or harder?
Day 4	Read Mary Anning (Pages 22-31) and answer the questions below.	Investigate the meaning of words when different prefixes are added (e.g. 're-', 'sub-', 'inter-', 'anti-' and 'auto-'	6 times tables: multiplication facts and division facts.  Don't forget you can go on Mathletics to support your understanding	Design different paper aeroplanes, how can you make them fly further, how can you make them fly for longer. Predict and explain your method.
Day 5	Sentence Challenge - It must be magic.  Complete the sentences.	Investigate the ways of spelling the 'sion/tion/cian etc' at the end of words.	7 times tables: multiplication facts and division facts.  Don't forget you can go on Mathletics to support your understanding	Design a meal for your family, what items would you need? How much of each would you need? How can you make it healthier? Write a recipe for the meal.

### Reading - Week 6:

The girl on a house on a dragon.



- What happened before this picture?
- How did the house get on top of the dragon? Who tied it onto the dragon's back?
- Is the dragon happy about this?
- How do the girl and the dragon know one another?
- Why is the girl sitting on top of the house and not inside it?
- Is anyone else inside the house?
- Where did the kites come from?

#### Mary Anning (Pages 1-11)

Find some words that you do not know the meaning of, look them up in a dictionary. Keep these in your mind, can you use them at all in your writing? How does Mary find fossils?

How did the fossil get into the rock?

How does Mary feel about being a fossil hunter?

How does Mary feel when she's out in the cold finding fossils?

Why do some people find fossils interesting?

#### Mary Anning (Pages 12-21)

Find some words that you do not know the meaning of, look them up in a dictionary. Keep these in your mind, can you use them at all in your writing? What did Mary do with the fish?

How did this help her?

Was Henry de la Beche a good friend to Mary?

What did the other scientists think of Mary?

Would it have been different if she was a man?

#### Mary Anning (Pages 22-31)

Find some words that you do not know the meaning of, look them up in a dictionary. Keep these in your mind, can you use them at all in your writing? What did the third fossil look like?

How was the third fossil different from the ichthyosaur and plesiosaur? How do we know that Mary is now famous?

How has her shop changed?

Was Mary lucky in her life?

Was she unlucky to have been born a poor girl?

#### It must be magic



All she could hear was the faint buzz, like a bee settling down on a flower, coming from the thing she held so protectively in front of her.

I have used a simile to describe the noise coming from the object.

Can you use a simile to add a description to these sentences?

The light glowed in her hands like\_\_\_\_\_.

The noise was rising from the thing in her hands like	•
Suddenly, the orb exploded like	

# English Tasks - Week 6:

Day 1: A prefix is an affix which is placed before the root of a word. Adding it to the beginning of one word changes it into another word. Use the words given and think of a rule that applies to the different prefixes.

# il-, im- or in-?

Use these examples of words to investigate when to use the prefixes il-, im- or in-. You can cut the cards out, colour-code them or join them with lines – it is up to you as the detectives!

illegal	inaccurate	impatient
immature	inactive	immortal
impossible	incorrect	illogical
indirect	illegible	insufficient
imperfect	immovable	incapable

Day 2: Use a dictionary and fill in the sheet below.

# Dictionary detective

Use a dictionary to find two examples of words that begin with each of the letter strings given. Take care to spell the words correctly.

	T T
beh-	
arr-	
аро-	
suf-	
ele-	
рор-	
fas-	
exp-	

Day 3: Work through the Year 3 and 4 spelling words (below) and try to identify which words have a Latin origin and which words have an Ancient Greek origin. What is the difference between the different origins? Which origin do you find harder to spell? Can you find anymore words from these origins?

## Word list - years 3 and 4

accident(ally) early actual(ly) earth address eight/eighth answer enough appear exercise arrive experience believe experiment bicycle extreme breath famous breathe favourite build February busy/business forward(s) calendar fruit caught grammar centre group century guard certain guide circle heard heart complete consider height continue history decide imagine describe increase different important difficult interest island disappear

knowledge learn length library material medicine mention minute natural naughty notice occasion(ally) often opposite ordinary particular peculiar perhaps popular position possess(ion) possible potatoes pressure probably

promise

purpose guarter question recent regular reign remember sentence separate special straight strange strength suppose surprise therefore though/although thought through various weight woman/women

Day 4: Complete the task on prefixes below. Have a try first and then check your answer. Remember trying and getting it incorrect, is better than not trying at all!

# Prefix profiles

Write examples in each column of words that use the prefix given. Think about what the prefix might mean and write your ideas in the box below.

re-	sub-	inter-
Example words:	Example words:	Example words:
What the prefix might mean:	What the prefix might mean:	What the prefix might mean:
	_	
super-	anti-	auto-
Example words:	anti- Example words:	auto- Example words:

Day 5: Complete the task below about different suffixes that sound the same. A suffix is an affix which is placed after the root of a word. Adding it to the end of one word changes it into another word.

# Mission: -tion, -sion, -ssion and -cian

Cut out the word cards and sort them into groups that spell their ending in the same way. Can you find a rule to help you know which spelling to use?

TIP: Look carefully at the spelling of the root word, thinking about what it would have been before the suffix was added (e.g. 'hesitation' comes from the word 'hesitate').

invention	extension	confession
comprehension	hesitation	tension
expression	musician	permission
magician	education	injection
attention	discussion	politician
action	electrician	expansion
admission	intention	completion
suspension	protection	concentration
reflection	mathematician	instruction
direction	obsession	communication

## Maths Tasks - Week 6:

Day 1: Partition the numbers below. Then write the number that comes next.

# 1000s, 100s, 10s and Is

Recognise the place value of each digit in 4-digit numbers



For each number in the table write the place value of each digit.

2 Write the number that comes after each number (1 more).

Example 3629



	Question 1	Question 2
a 278		
<b>b</b> 491		
c 508		
d 651		

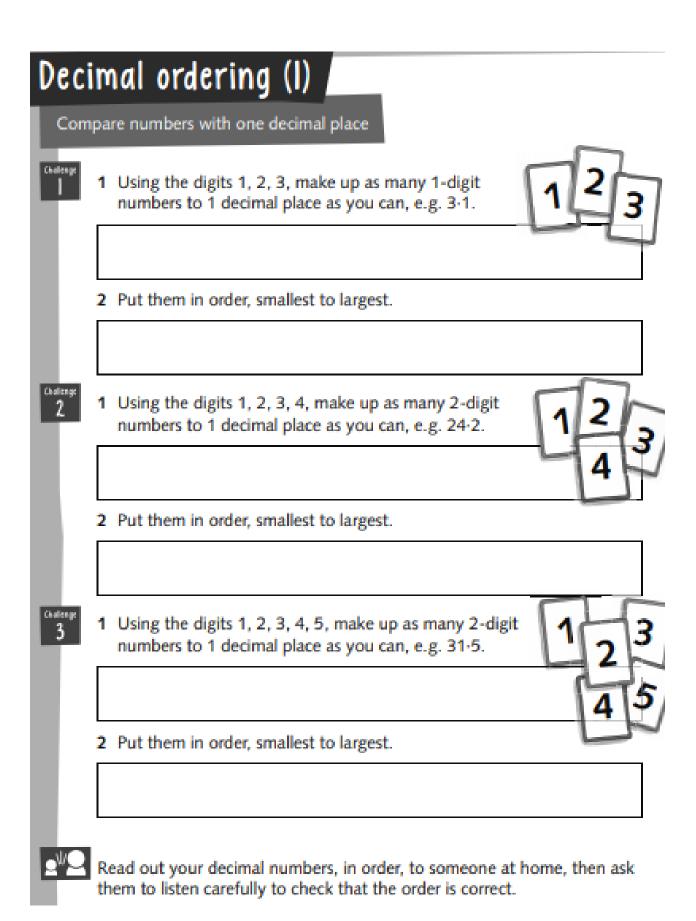
	Question 1	Question 2
a 1276		
b 2851		
c 3863		
d 4277		

	Question 1	Question 2
a 5439		
<b>b</b> 6376		
c 7386		
d 7408		



Play 'I am thinking of a number' with someone at home.

- · Think of a 3- or 4-digit number and secretly write it down.
- · Tell the person the value of each digit but not in order.
- Can they work out your number?



Day 3: Make decimal numbers and then round to the nearest whole number. Remember if you are rounding to the nearest whole number, the tenths tell you whether to round up or down.

# Decimal rounding

Round decimals with 1 decimal place to the nearest whole number



- 1 Using the digits 1, 2, 3, 4, make up ten 2-digit numbers to 1 decimal place, e.g. 43-2. Write your numbers in the table provided.
- Round them to the nearest whole number.

he	ne	are	st	W	ho	e
2	ſ	3		_	7	
	J	7		*	l	

Challenge 2

- 1 Using the digits 3, 4, 5, 6, make up ten 1-digit numbers to 1 decimal place, e.g. 4-6. Write your numbers in the table provided.
- 2 Round them to the nearest whole number.

My numbers	Rounded to the nearest whole number
-	



- 1 Using the digits 5, 6, 7, 8, 9, make up ten 1-digit numbers to 1 decimal place as you can, e.g. 8-6. Write your numbers in the table provided.
- 2 Round them to the nearest whole number.







Write some decimals here for someone at home to round to the nearest whole number. Check that they get them right!

Day 4: Write the multiple that comes before and after the given numbers. Use the strategy shown to work out the answers.

# The 6 multiplication table

Recall multiplication and division facts for the 6 multiplication table

Challenge

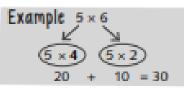
Write the multiple of 6 that comes before or after these numbers.

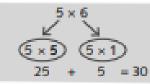
	Before
a 36	
b 12	
c 24	
<b>d</b> 54	

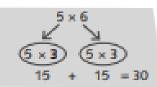
	After
a 66	
b 48	
c 40	
<b>d</b> 18	

Challenge 2

Use the strategy shown to write the answer to the 6 multiplication calculation.







1 a 4 × 6
b 9 × 6

2 a 8 × 6

3 a 8 × 6
b 9 × 6

Challenge 3

Find the division number sentence for 6 that matches the multiplication number sentence. Join them together using a ruler. Write the answers.

480 ÷ 6 =

360 ÷ 6 =

420 ÷ 6 =

540 ÷6 =

60 × 6 =

 $80 \times 6 =$ 

90 × 6 =

70 × 6 =



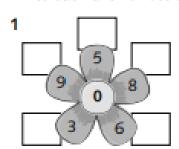
Look for multiples of 6 all around you – at home and when you're out. On the back of this sheet, draw or write about at least four examples of multiples of 6 you found, and where you found them.

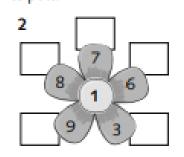
# The 7 multiplication table

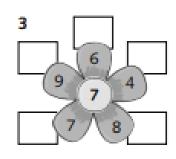
Recall the multiplication and division facts for the 7 multiplication table

Challenge

Multiply the number in the middle by the number in each petal. Write each answer beside its petal.







Challenge 2

Complete the multiplication and division facts.

Challenge 3

Complete the table below.

×	0	3	4	6	7	9	20	30	70
3				18					
9								270	
6									
8		24							
7									



Make your own set of 1-12 number cards. Write the numbers 1 to 12, one in each section and cut out your cards.

How to play:

Shuffle the cards and place them face down on the table. Turn over a card. Multiply the number on the card by 7. Keep the card if you are correct. Practise other multiplication facts too.

#### Work Packs for Year 4 Week 7

Work should be completed in the book.

Work can be completed on the computer and printed out and stuck in

	Reading	Writing	Maths	Other
Day 1	Read the picture -Tarzan  Answer the questions below.	Fronted adverbials.	Reflecting shapes  Don't forget you can go on  Mathletics to support your  understanding.	Read the PowerPoint slides on volcanoes. Take notes, you will need to use these later on in the week.
Day 2	Read Death of the Dinosaurs (on Bug Club) (pages 1-11) and answer the questions below.	Comparative and superlative adjectives. Complete the worksheets.	Lines of symmetry  Don't forget you can go on  Mathletics to support your  understanding	Label the picture of a volcano. Then write what happens at each place (in your own words)
Day 3	Read Death of the Dinosaurs (pages 12-24) and answer the questions below.	Comparative and superlative adjectives. Describe the 7 dwarfs.	Translating shapes  Don't forget you can go on  Mathletics to support your  understanding	Complete the worksheet about the Ring of Fire, locate where the different volcanoes are.
Day 4	Read a book on Bug club. Summarise the main paints you have read.	Multi-clause sentences. Identify the main clause and the subordinating clause.	Ordering angles  Don't forget you can go on Mathletics to support your understanding	Compare 2 volcanoes on the PowerPoint. Think about the similarities and differences.
Day 5	Read the picture - Please take care of this bear	Complete the quizzes from this week.	Triangle search. (See help sheet below)  Don't forget you can go on Mathletics to support your understanding	Create a booklet explaining the different types of volcanoes. Include key subject words.

# Reading - Week 7:

#### Tarzan



- Describe this setting. How could you describe the trees? The vines? The light and shadows?
- What time of day is it?
- Why is Tarzan riding on the back of an ape?
- Can Tarzan trust the ape? Can the ape trust Tarzan?
- Where are they going?
- Compare the stories of Tarzan and Mowgli (The Jungle Book). What's similar and what's different?

#### Death of the Dinosaurs (Pages 1-11)

How might a meteor have killed the dinosaurs?
What happened when the meteor fell?
Why is the layer of iridium interesting to scientists?
How might it have got into the rock?
Why didn't all life on Earth die when the meteor hit?
What sort of animals survived?

### Death of the Dinosaurs (Pages 12-24)

What happened to Pangaea?
How was it like a jigsaw?
Why did the change in the weather kill the dinosaurs?
What was Earth like at this time?
What would life on Earth be like if the dinosaurs had not died out?
Would humans exist? Why?

#### Please take care of this bear



Who is the bear on the platform?

Why is he all alone at a train station?

Who wrote the tag around his neck?

What lies beneath his bright, red hat?

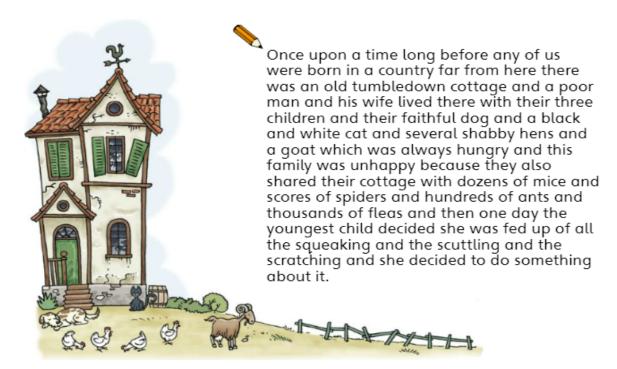
Why can't the bear stay at the station?

In what way is this bear similar/different to a 'normal' bear?

What will happen to the bear next? What does it mean by 'this particular bear's journey was really just beginning'?

English: Week 7

Day 1: Fronted adverbials. Read through the text below. Underline the fronted adverbials and add in the correct punctuation. Then read the passage, how does the punctuation change the way you read it?



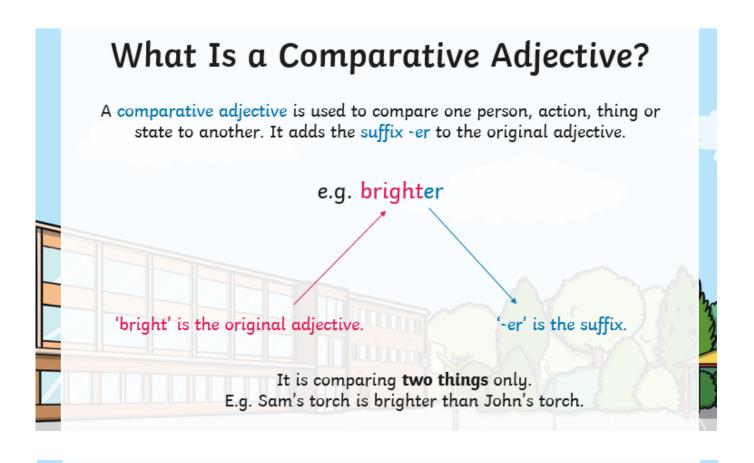
#### Fronted Adverbials

Fronted Adverbials are words or phrases at the beginning of a sentence which are used to describe the action that follows.

Time	Frequency	Place	Manner	Possibility
Afterwards,	Often,	Above the clouds,	Sadly,	Almost unbelievably,
Already,	Again,	Below the sea,	Slowly,	Much admired,
Always,	Daily,	Here,	Happily,	Nearly asleep,
Immediately,	Weekly,	Outside,	Awkwardly,	Quite understandably,
Last month,	Fortnightly,	Over there,	Bravely,	Really happily,
Now,	Yearly,	There,	Like a ,	Perhaps,
Soon,	Sometimes,	Under the ground,	As quick as a flash,	Maybe,
Yesterday,	Rarely,	Upstairs,	As fast as he could,	Just arrived,
Today,	Every second,	In the distance,	Without a sound,	Certainly amused,
Tomorrow,	Twice a year,	Between the sea and the sky,	Without warning,	Obviously angry,
Next year,	Once a minute,	Everywhere she looked,	Unexpectedly,	Definitely confused,
In January,	Once,	Around the tent,	Unfortunately,	Completely exhausted,
On Tuesday,	Once or twice,	Back at the house,	Suddenly,	Barely alive,
In the morning,	Three times,	Nearby,	Mysteriously,	Out of breath,
After a while,	Constantly,	Down by the cliffs,	Frantically,	Decidedly unimpressed,
As soon as she could,	Regularly,	Behind the shed,	Anxiously,	Perfectly confident,
Before long,	Frequently,	In the wooden box,	Courageously,	Positively trembling with
All of a sudden,	Infrequently,	Over my bed,	Silently,	excitement,
In the blink of an eye,	Occasionally,	Somewhere near here,	Curiously,	Purely practically,
Just then,	Rarely,	Far away,	Nervously,	Somewhat flustered,
Eventually,	Never in my life,	Wherever they went,	Rapidly,	Utterly joyous,
Later,	Never before,	North of here,	Carefully,	Totally overwhelmed,



Day 2: Using a combination of comparative and superlative adjectives. Complete the worksheets on comparative and superlative adjectives.



# What Is a Superlative Adjective?

A superlative adjective is used to compare one person, action, thing or state to **all others** in the same group. It adds the suffix - est to the original adjective.

e.g. quietest

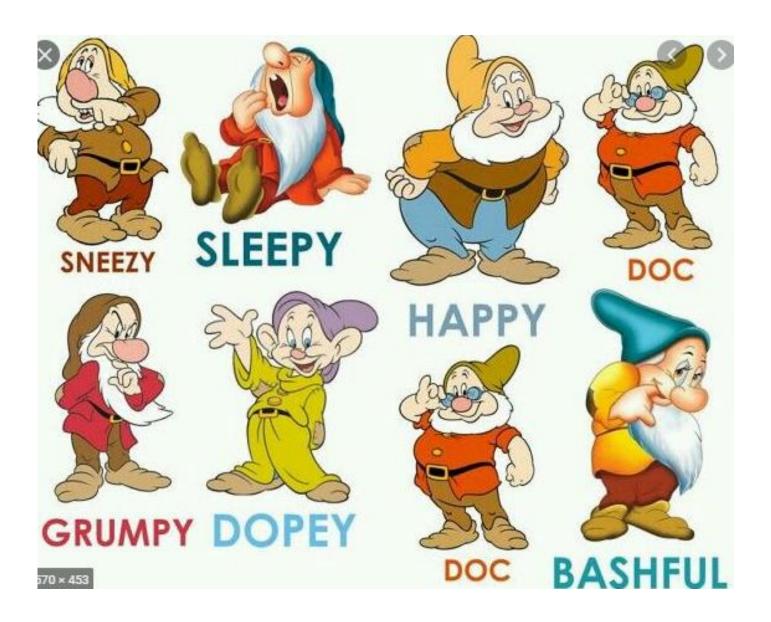
'quiet' is the original adjective.

'-est' is the suffix.

It is comparing **more than two things** only. E.g. Aisha is the quietest in the class.

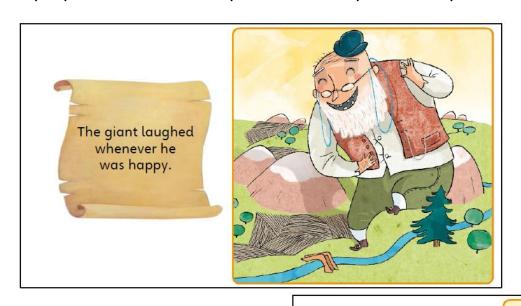
9 stupid  10 soft  11 fut  12 sad  13 early
---

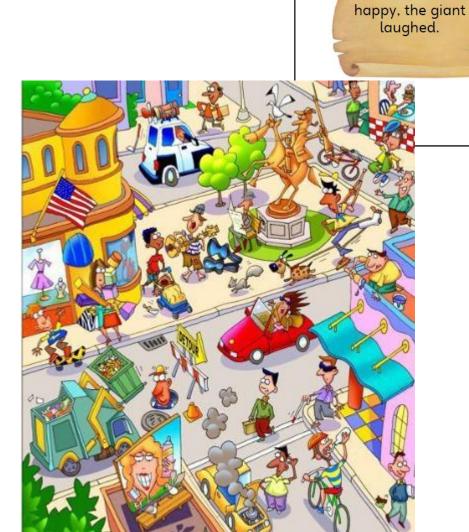
Day 3: Using a combination of comparative and superlative adjectives, think of 10 sentences to describe and compare the 7 dwarfs from Snow White and the 7 Dwarfs.



Day 4: Multi-clause sentences. Identify the main clause and subordinating clause below. Write 5 of your own, underline the main clause - can you include any prepositions? Use the picture for inspiration if you cannot think of your own.

Whenever he was





#### **Question 1**

#### A comma is:

- a) a punctuation mark that separates parts of a sentence or items in a list, and is read as a short pause
- b) a long, deep sleep
- c) a punctuation mark that shows the end of a sentence.

#### **Question 3**

Which of these sentences has the comma in the right place?

- a) For lunch, we had roast beef Yorkshire, pudding and vegetables.
- b) For lunch, we had roast beef Yorkshire pudding and, vegetables.
- c) For lunch, we had roast beef,Yorkshire pudding and vegetables.

#### **Question 1**

#### A conjunction is:

- a) a word that links parts of a sentence together
- b) a nasty disease of the eye
- c) the name of a person, place or thing.

#### **Question 3**

A subordinate clause is:

- a) a clause that couldn't be a sentence on its own
- b) a small animal like a rabbit
- c) a word that tells you what is happening in a sentence.

#### **Question 2**

#### **Punctuation marks:**

- a) are clauses that can be used as sentences on their own
- b) tell us how to read a piece of writing so that the meaning is clear
- c) give you a flat tyre.

#### **Question 4**

Which of these sentences has the comma in the right place?

- a) Once upon a time, there was a wicked goblin.
- b) Once upon, a time there was a wicked goblin.
- c) Once, upon a time there was a wicked goblin.

#### **Question 2**

#### A main clause is:

- a) a scary animal like a bear
- b) a clause that could be used as a sentence on its own
- c) a word that tells you more about what is happening in the sentence.

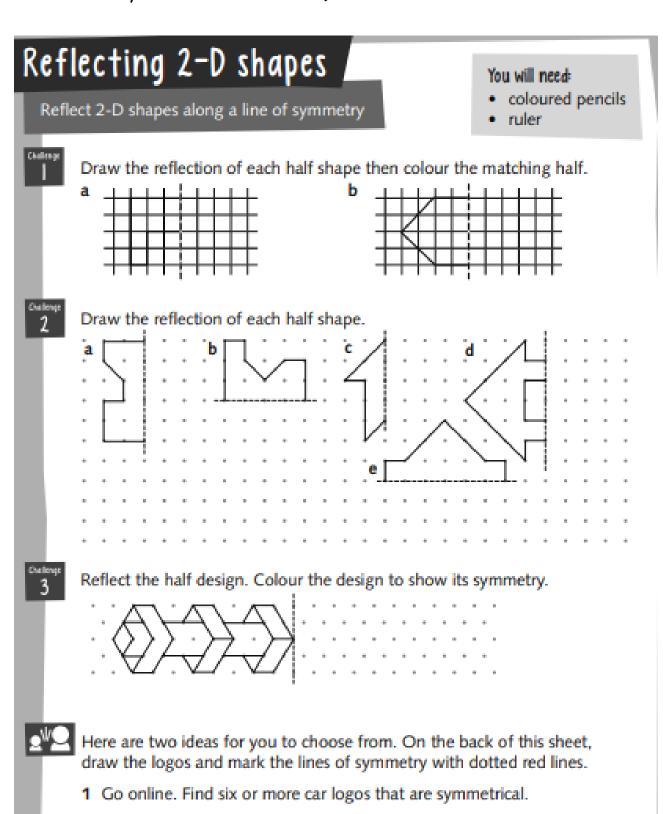
## **Question 4**

Which of the following is a subordinat clause?

- a) the giant's stomach rumbled
- b) because he was hungry
- c) he ate a massive sandwich.

#### Maths Tasks - Week 7:

Day 1: Draw on the reflection (put a mirror on the line and it should look the same as when you remove the mirror)



2 If you don't have access to the Internet, look at cars parked outside your home or find car logos in the motoring section of a newspaper.

# Two lines of symmetry Reflect shapes in lines of symmetry

You will need:

Hint

Ċ

coloured pencils

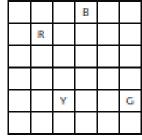
Challeng

- In each grid, colour the squares using the code in the hint box.
- 2 Reflect the coloured squares in both lines of symmetry to complete the pattern.

_				
a		R		
_	R	86		
-				
_				
_				
-				

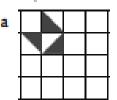
G R Y R

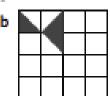
R = red B = blue G = green Y = yellow Use one colour at a time.

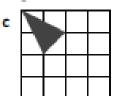


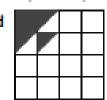
Challenge 2

Complete the designs so that each design has two lines of symmetry.



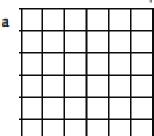


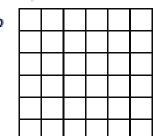


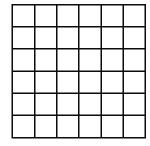


Challenge 3

Make three different patterns, each with two lines of symmetry.







<u>e</u>//2

Here are two ideas for you to choose from. Draw your shapes or patterns and the lines of symmetry on the back of this sheet.

- 1 Go online. Find Roman mosaics that have two lines of symmetry. Choose a simple design and make a sketch of it.
- 2 If you don't have access to the Internet, look for symmetrical shapes in your home instead – shapes in carpets, tiles, curtains, furniture, etc.

Day 3: Translating shapes, use the grids to move the shape and then write the coordinate (Remember 'along the corridor, up the stairs')

# Translating shapes You will need: ruler Translate a shape on a square grid with numbered lines Translate shape A, 3 squares to the right to make shape B. List the coordinates of shape B. 1 Translate shape C: a 2 squares to the right then 1 up to make shape D. b 2 squares to the right then 2 down to make shape E. 3 -2 List the coordinates of: a Shape D: b Shape E: ( Translate shape F: F 1 2 left, 1 down to make shape G. 3 2 4 left, 2 down to make shape H. 2 3 2 left, 1 up to make shape I. 4 4 left to make shape J.



Here are two ideas for you to choose from. Sketch the patterns on the back of this sheet.

- 1 Use an internet search engine to look up brick wall designs. Find two or three different designs that involve the translation of whole and half bricks.
- 2 Look up curtains, carpets, tiles, clothing etc. for patterns that involve translation. Choose one and sketch the pattern.

Day 4: Cut the angles towards the bottom of the page and order them. Fill in the table. Think about how you can make a right angle. See below for some help.

	les ir	_	_	ıp to tv	vo right	angles	by size		You w	ill need: sors
Outrops 1, 2, 3	Cut out In the ta acute (1	ble, wr	ite the	letters o		ngles in	order 1	rom th	e most	
	Order Angle	1	2	3	4	5	6	7	8	9
Challenger  Challenger  3	Find pairs of angles that together make two right angles.  List the pairs of angles.									
	List the	angles	you use		*	<u></u>	<del>-</del>	*	م م م م م م ا ا ا ا م م	
	f (	meone	at hom	e. look	at the c	different	%-	and ob	tuse an	eles

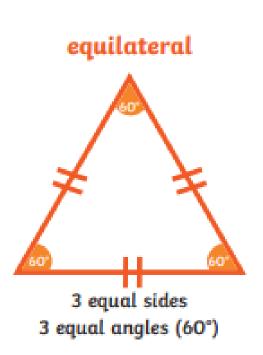
you can make by using two or more acute angles. Record each set of angles you use on the back of this sheet.

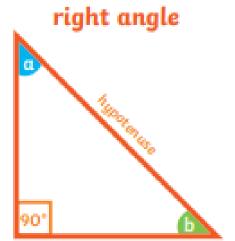
Day 5: Triangle search (Support posters available) Draw some triangles using the dotted boxes, label the type of triangle you have drawn. Identify some features.

# Types of Triangle

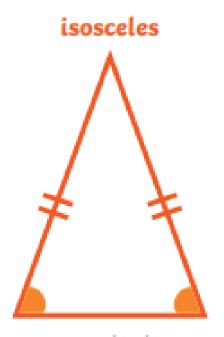
twinkl

visit twinkl.com



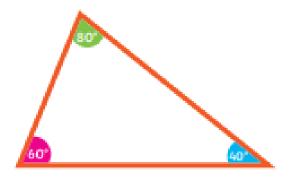


One angle is a right angle (90°)
Two other angles add up to 90°
The longest side is called the
hypotenuse.



2 equal sides 2 equal angles

scalene



All sides are different All angles are different.

# Triangle search

Use properties and sizes to compare and classify triangles

#### You will need:

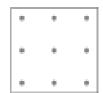
- scissors
- ruler

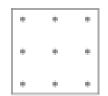


Chris said, "You can make eight different triangles on a 3 x 3 pin board." Is this true? Investigate.

For each triangle you draw, write its name and mark any equal sides as shown for triangle 1.

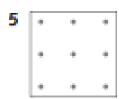


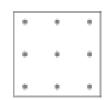


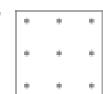




isosceles









Write the numbers of your triangles that have:

a	a	ń	el	ıt	an	el	e
		-	т.				

b one line of symmetry

2	Which	type	of :	triangle	cannot
	be mad	de on	a p	in boa	rd?

Cut out the eight triangles at the side of the sheet. Use all eight triangles to make:

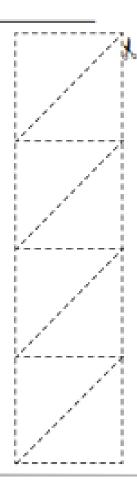
1 a right-angled isosceles triangle 2 an octagon

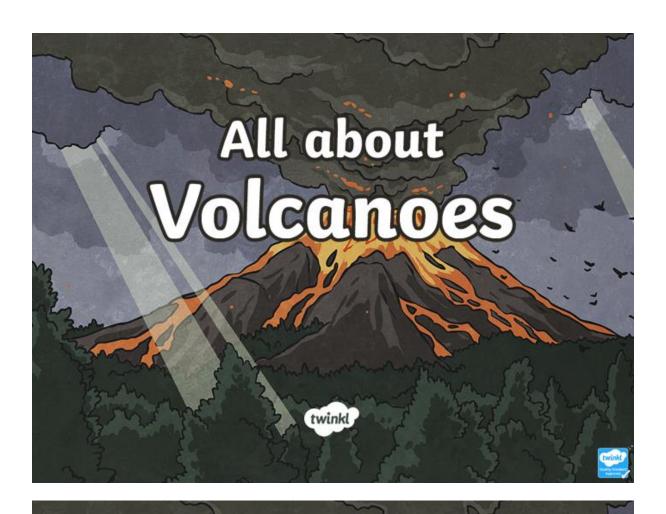


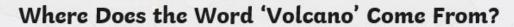
Using four of the triangles, discuss how they will fit edge-to-edge to make:

a a square b a rectangle c an isosceles triangle

2 Use six of the triangles to make a pentagon and then a hexagon.







Have you ever thought about why volcanoes are actually called 'volcanoes'? Can you think of a reason why?

The word 'volcano' comes from the island 'Vulcano', which is a volcanic island in Italy.



Vulcano, Italy.



# The Roman God of Fire

Roman mythology says that Vulcan lived in a volcano. As well as being the god of fire, he made many weapons and **forged** them using metal and fire. He was a very skilled blacksmith.



Romans believed that if Vulcan was made angry, the volcano would erupt. So they tried their best to please him and not anger him.

Forged: to have made or shaped a metal object using a fire or furnace.

#### The Mantle

The mantle is approximately 2897km thick and is made of a solid, rocky substance called molten rock or magma. This is what escapes when a volcano erupts.

#### The Outer Core

The outer core is a liquid layer made out of molten iron and nickel. This liquid metal creates the earth's magnetic field.

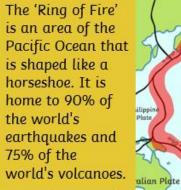
#### The Inner Core

This is a solid layer and is made of iron and nickel. It is the hottest part of the earth and can reach temperatures of up to 5500°C!

#### The Crust

This is the outer layer of the earth. It varies in thickness from 0 – 60km thick. It is not even and is made up of pieces which overlap to cover the entire planet. These pieces are called 'tectonic plates'.



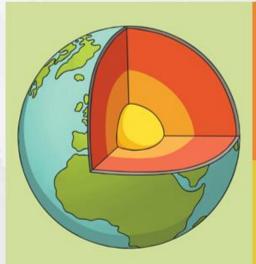




of 452 volcanoes,
which stretches
from the southern
tip of South
America, up along
the coast of North
America, down
through Japan, and
into New Zealand.

#### How Are Volcanoes Formed?

Deep in the earth, it is extremely hot. It is so hot, in fact, that rocks actually melt and form magma, which makes up the mantle of the earth.



The upper mantle mixes and moves, which creates pressure underneath the crust. This pressure can sometimes cause the mantle to leak out onto the surface of the earth

- this is a volcano!

Over time, as this magma leaks out, the volcano will get bigger and bigger.

## The Three Stages of Volcanoes

Scientists have placed volcanoes in to three different categories. What do you think each one is?

#### Active

An active volcano is one that has erupted recently, and there is the possibility that it may erupt again.

#### Dormant

A dormant volcano is one that has not erupted for a long time, however, it may still erupt in the future.

#### Extinct

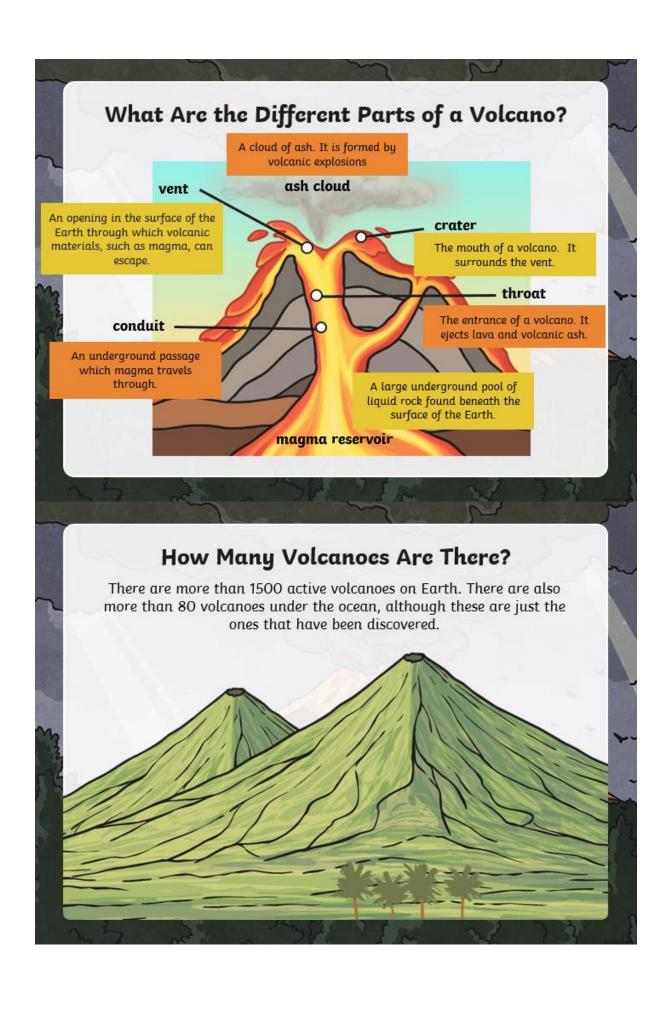
An extinct volcano is one which has erupted thousands of years ago, but it will probably never erupt again.

## Why Do Volcanoes Erupt?

We know that the earth's crust is made up of huge slabs called tectonic plates. These fit together like a jigsaw puzzle and they sometimes move.



Friction: the resistance created when one surface rubs against another. The movement causes friction which causes earthquakes and volcanic eruptions near the edges of the plates. The theory that explains this process is called 'plate tectonics' – this means the plates are moving in different directions and at different speeds. Sometimes they collide or brush past each other and cause these earthquakes and volcanic eruptions.



## What Types of Volcano Are There?

Mount St. Helens in Washington, USA is a composite volcano.



#### Composite Volcanoes

These volcanoes are steep-sided volcanoes and are made up of lots of layers of volcanic rocks. They usually erupt in an explosive way because the magma in these volcanoes is quite sticky. It clogs up the passage that it has to pass through. Pressure is built inside the volcanic chamber and this results in the volcano erupting violently.

## What Types of Volcano Are There?

Sunset Crater in Arizona, USA is a cinder cone.



#### Cinder Cones

Cinder cones are circular or oval cones. They are made up of small fragments of lava, which are blown into the air through a single vent. When they cool down, they form rock around the vent. They grow quickly, but are not usually very big. They are not usually dangerous either.



Shield Volcanges like this one in Hawaii are common in this part of the world.



#### **Shield Volcanoes**

Shield volcanoes are bowl or shield-shaped in the middle. When they erupt, the lava is quite runny and it travels long distances down the side of the volcano before it cools down. This lava forms long, gentle slopes that look like a warrior's shield, which is how they got their name. These volcanoes do not often explode.

#### More Volcano Facts

# What is the difference between magma and lava?

Magma is liquid rock inside a volcano. Lava is the name for liquid rock that has flowed out of a volcano. Lava takes a long time to cool down as it is not a good heat conductor. As a lava flow cools down, it gets slower and thicker.

#### Heat Conductor:

something which can transfer heat from one object to another.

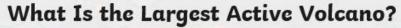
#### What is a 'pyroclastic flow'?

This is the most deadly of all volcano activities.

It is a liquidised mixture of solid and part-solid fragments and hot, expanding gases.

They look like a snow avalanche but are extremely hot and contain poisonous gases. They move at the speed of a hurricane.







The largest, active volcano in the world is Mauna Loa in Hawaii. It is 13,677 feet above sea level. From its base below sea level to its summit, Mauna Loa is taller than Mount Everest.

#### Volcanoes of the World

Mount St Helens

Mount St Helens is an active volcano located in Washington, USA in the Cascade Mountain Range.

This was the first time pyroclastic flows (the clouds of hot gas, ash and rock) were studied using new scientific techniques.

Mount St Helens is still active, and is monitored closely by geologists to predict if it will erupt again. On 18<sup>th</sup> May 1980, it erupted and killed 57 people and destroyed lots of roads and homes.

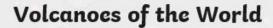
2

5

An earthquake triggered a landslide, which caused a sideways blast, sending clouds of ash, gas and rock speeding away from the

Click on the numbers to reveal the facts.





Mount Fuji, Japan



Mount Fuji is the highest mountain in Japan. It is 3776m high. It is on the island of Honshu, about 100km from Tokyo.



Over 100,000 people climb Mount Fuji every year. It is the most climbed mountain in the world.



The volcano is actually three separate volcanoes piled one on top of the other with Fuji at the top.



A forest named Aokigahara lies at the foot of the mountain and is said to be haunted by ghosts and goblins.



Mount Fuji last erupted in 1708. It has become a symbol of the country and is featured in lots of paintings.

Click on the numbers to reveal the facts.

#### Glossary

Forged: to have made or shaped a metal object using a fire or furnace.

Molten: something made in to a liquid by heat.

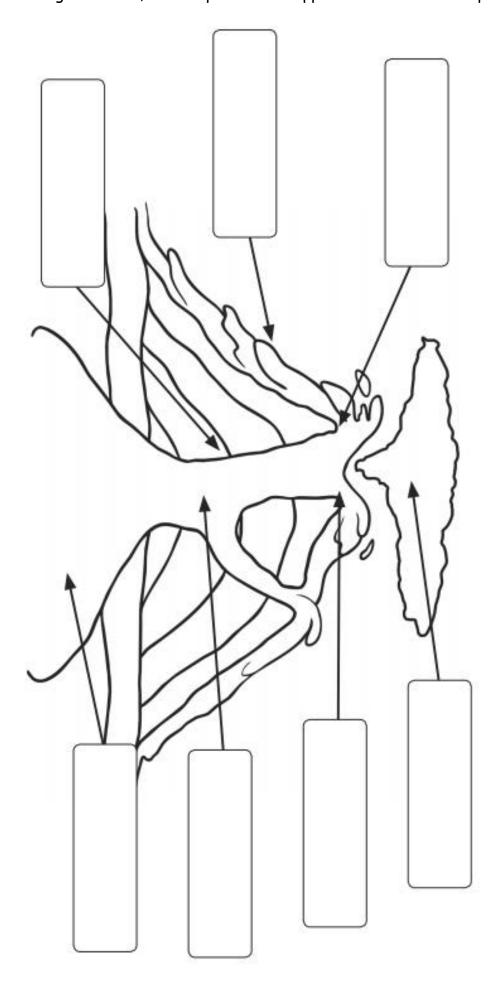
Magma: hot fluid or semi-fluid below the earth's crust.

**Friction**: the resistance created when one surface rubs against another.

**Heat conductor**: something which can transfer heat from one object to another.

**Archaeologist:** someone who studies history using evidence from fossils and artefacts.

Day 2: Label the diagram below, then explain what happens at each of these points.



Day 3: Label the worksheet by locating the different volcanoes. You can use the internet to help you.

## Cotopoxi Mt. Fuji It is home to 90% of the world's earthquakes and 75% of the world's volcanoes. Cut and paste the names of major volcanoes found along the Ring of Fire. The "Ring of Fire" is an area of the Pacific Ocean shaped like a horseshoe. Santa Maria Mauna Loa Volcano Ring of Fire Map Krakatoa Pacific Ocean Taal Popocatèpetl Mayon Sakurajima Arenal Mount St. Helens Christchurch visit twinkl.com

#### Work Packs for Year 4 Week 8

Work should be completed in the book.

Work can be completed on the computer and printed out and stuck in

	Reading	Writing	Maths	Other
Day 1	Read 'The song of Sky and Sand (on Bug CLub) (Chapter 1)' and answer the questions below.	Singular and plural	Time graphs  Don't forget you can go on  Mathletics to support your  understanding	Using the information about animal classifications, sort the animals into vertebrates and invertebrates.
Day 2	Read 'The song of Sky and Sand (Chapter 2)' and answer the questions below.	Apostrophes for possession	Bar charts  Don't forget you can go on  Mathletics to support your  understanding	Give 5 examples of each animal classification. Compare 4 animal classifications.
Day 3	Read 'The song of Sky and Sand (Chapter 3)' and answer the questions below.	Apostrophes for possession	Fractions  Don't forget you can go on Mathletics to support your understanding	Design a leaflet about different animal classifications. Include key facts and where you might find these animals.
Day 4	Read 'The song of Sky and Sand (Chapter 4)' and answer the questions below.	Plurals and possessives	Fractions  Don't forget you can go on  Mathletics to support your  understanding	Make the mouth using the teeth. Research the role of the different teeth.
Day 5	Read 'The song of Sky and Sand (Chapter 5 and 6)' and answer the questions below.	Quizzes	Multiples of 25, 100 and 1000  Don't forget you can go on Mathletics to support your understanding	Research and find out about food chains. Complete the worksheet on food chains.

Reading: Week 8

#### Day 1: The song of Sky and Sand (Chapter 1)

In which country is this story set?
Why had the pump been overused?
Is it right that the children should have to travel so far to get water?

#### Day 2: The song of Sky and Sand (Chapter 2)

How did people drink during a drought in the past? Why is Grandma not scared? Why doesn't Ramata's family move to the city?

#### Day 3: The song of Sky and Sand (Chapter 3)

What was the riddle about?
Why did Ramata wake up so early?
Why do people see patterns in the stars?

#### Day 4: The song of Sky and Sand (Chapter 4)

How did Grandma help them on their journey? What dangers do the travellers face? Were the adults right to let the children go on the quest? Why?

#### Day 5: The song of Sky and Sand (Chapter 5 and 6)

What is the crooked hand?
What does the sunbird tell them?
Are the villager's problems solved forever?

#### English Week 8:

Day 1: Singular and plural - change from singular (just 1) to plural (more than 1)

#### Singular sparrow and plural sparrows Change the text to the plural.

The house sparrows
(usually just called the sparrow)
is found all over Britain. It is a small bird with a
brown back and greyish chest and underparts.
The male sparrow also has a black bib.

The sparrow lives in gardens, farms and the roofs of houses. It eats insects and seeds. You may sometimes see it taking a dust bath. This is a way of cleaning its feathers.

The female house sparrow lays between three and five greyish-white eggs three times a year.

When they hatch, the mother looks after the baby sparrows until they are old enough to fly.

Day 2: Apostrophes for possession. Rewrite this passage using apostrophes.

#### Who owns what? 3

Rewrite this passage. Change the 'belonging to' phrases by using apostrophes and apostrophe phrases. The first one has been done to show you how.

#### hís uncle's cave

Aladdin was locked in the cave belonging to his uncle.

Treasure was heaped high all around him. There was a crown of a king. There was a tiara from a queen. There were rings and necklaces belonging to ladies. In the middle of the cave the beams of the sun shone down on to the lamp. Aladdin picked up the lamp and rubbed it. Suddenly from the spout of the lamp a genie appeared.

"I am the genie belonging to the magic lamp," the genie said. "Your wish is my command! You can wish for anything you want. You could even have a castle of a king. Whenever you want to make a wish rub the top belonging to the lamp and I, the genie from the lamp, will appear."

Day 3: Apostrophes for possession. Change the phrase underlined into a phrase using apostrophes.

#### Apostrophe alert!

#### Change the underlined phrases to apostrophe phrases.

At the airport everybody had the wrong luggage.

the king's crown. "Which of you has got <u>the crown belonging to the king?</u>"

shouted the assistant.

"I've got it!" said the pirate.

"Who has the wooden leg belonging to the pirate?"

"We've got that," said the sailors, "but where's our stuff?"

"Who has got the knot belonging to the sailors?" asked the assistant. "And who's got the dresses belonging to the princesses?"

"We've got those!" shouted two ladies. "And we've got the basket belonging to the cat and the toys belonging to the children but who has our umbrellas?"

The pirate had <u>the umbrellas belonging to the ladies</u>.

He was wearing one as it it was a sword and using the other as a crutch.

Day 4: Plural possession. Check for errors and correct them

#### Spot the mistakes on the pinboard below.



Day 5: Answer the quizzes below.

#### We can use an apostrophe:

- a) when we are out of breath
- b) to show the end of a sentence
- c) to show possession.

# Which of these sentences is punctuated correctly?

- a) The giants shoes were enormous.
- b) The giant's shoes were enormous.

# Which of these sentences is punctuated correctly?

- a) The writers' pencils were sharp.
- b) The writers pencil's were sharp.

# Does this sentence need an apostrophe?

I ate two peaches.

#### Which of these is punctuated correctly?

- a) We crept into the bears cave.
- b) We crept into the bear's cave.

# Change this sentence from singular to plural:

The dog is sleeping.

#### Maths Week 8:

Day 1: Convert between tables to graphs. (Make sure you use a ruler). Then answer question about the data.

		_				
Bus	station time graphs				ou Will	need:
Inter	pret and present continuous data in si	mple tim	e graphs		ruier	
Dallerges 1, 2, 3	The table shows the temperature at the bus station at 12 midday for one were the station at 12 midday for on	26. 25. 25. 24.	Midday ter	mperature	at bus	station
2,3	1 Which day was: a the warmest? b the coolest?  2 On which day did the midday temperature record: a a rise of 6°C compared with the	19 M	on Tues V	/ed Thur Day	Fri Sa	x t Sun
	b a fall of 5°C compared with the	day befo	re? _			
Challenge	The table shows half-hourly		Office ten	peratures		
3	temperatures in the bus station 11:		12:00 12: 22°C 16		1:30 21°C	2:00 22°C
	1 Estimate the temperature at:					
	<b>a</b> 11:15 a.m. °C <b>b</b>	1:15 p.m	۱.	°C		
	2 a After which time was the heatin	g accider	ntally swi	tched off	?	
L	<b>b</b> By how many degrees did the te	mperatu	re drop?		°C	
<b>₽</b> ₩ <b>Q</b>	What kind of weather will you have Find out from the internet, TV or nev				ast for	r

your region. Take turns to ask and answer questions which involve

making calculations about the temperatures.

Day 2: Complete the worksheet using tallies and bar charts. Remember to use a ruler when drawing a graph.

### Football scores bar chart

Solve problems using data presented in scaled pictograms, bar charts and tables

This table shows the results from 30 football matches.

1-0	2-0	0-2	0-0	1 –1	0-4
2 – 1	0-3	2 – 2	4 - 0	0-0	2-3
3 – 2	1-1	1-3	0 – 1	3-0	1-1
0-0	3-2	4-0	1-1	0-2	3 – 1
2 - 0	2-2	0-2	1-2	2-0	1-1

A score of 3 – 1 gives a goal total of 4.

A score of 0 – 0 gives a goal total of 0.

I, 2, 3

- Make a tally mark for the goal total of each match.
- 2 Count the tally marks and complete the total column in the table.

Goal total	Tally	Total
0		
1		
2		
3		
4		
5		

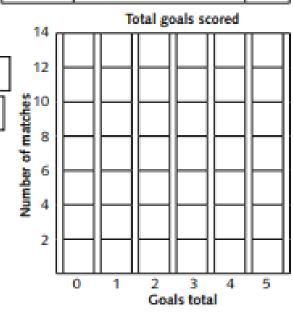
2,3

- Complete the bar chart.
- 2 In how many matches were:

a 4 goals scored?

b less than 3 goals scored?

c 3 or more goals scored?



Challeng 3

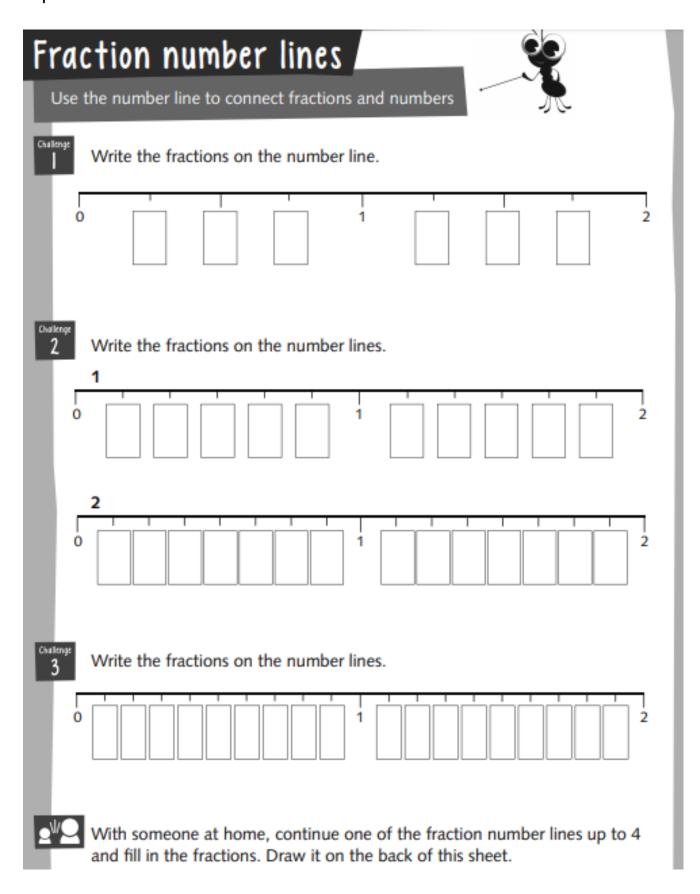
1 How many matches were drawn?

2 How many matches were not goal-less?



Take turns to ask and answer questions that involve making calculations about the goals scored. Write three questions and their answers on the back of this sheet.

Day 3: Complete the number lines. Remember to look at the number of spaces between the whole numbers.



# Fraction practice

Use multiplication and division to find non-unit tenths and hundredths

Challenge

Work out these tenths and hundredths.

Remember, divide by 10 to find tenths, divide by 100 to find hundredths.

- $\frac{1}{10}$  of 40

- $e_{10} of 90$

 $c \frac{1}{10}$  of 50

- $g_{10}^{1}$  of 70
- $i = \frac{1}{10}$  of 100

- **b**  $\frac{1}{100}$  of 500
- $\frac{1}{100}$  of 700
- $f = \frac{1}{100}$  of 400
- $h = \frac{1}{100}$  of 900
- $j = \frac{1}{100}$  of 1000

Challenge 2

Work out these tenths and hundredths.

- $a = \frac{3}{10}$  of 180
- $\frac{7}{10}$  of 110
- $e^{\frac{2}{10}}$  of 260
- $g \frac{4}{10}$  of 330
- i  $\frac{6}{10}$  of 4200

- **b**  $\frac{5}{100}$  of 600
- $\frac{1}{100}$  of 800
- $f = \frac{7}{100}$  of 1200
- $h = \frac{3}{100}$  of 1500
- $j = \frac{9}{100}$  of 1700

Challenge 3

Work out these tenths and hundredths.

- $a \frac{7}{10}$  of 820
- c 3/10 of 950
- $e^{\frac{2}{10}}$  of 1630
- $g \frac{4}{10}$  of 1480
- i  $\frac{6}{10}$  of 1590

- **b**  $\frac{6}{100}$  of 2600
- d  $\frac{5}{100}$  of 4100
- $f = \frac{8}{100}$  of 5300
- $h \frac{2}{100}$  of 6600
- $j = \frac{2}{100}$  of 7100

## Multiples of 25, 100 and 1000

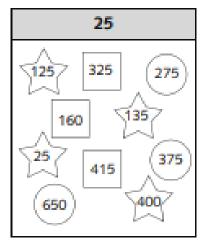
Count in multiples of 25, 100 and 1000

You will need:

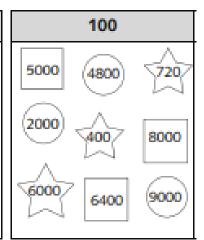
coloured pencil



Find and colour the multiples of each number.



100
1800 1607 (380)
300 2400 800
1000 420
600

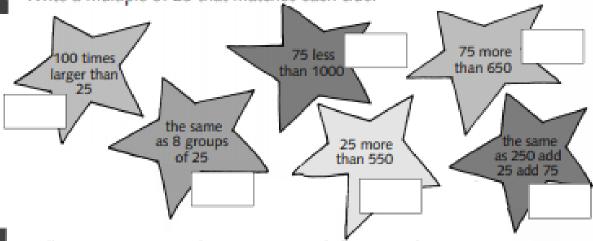


Challenge 2 Write the multiples from the boxes above in the correct order, smallest to largest.

- a 25 →
- b 100 →
- c 1000 →

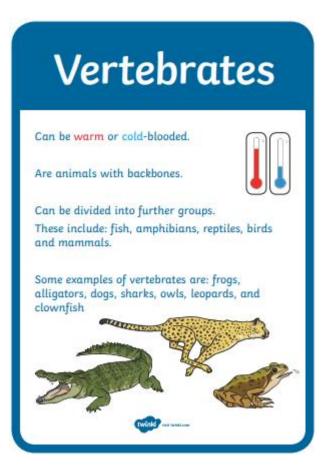
Challenge 3

Write a multiple of 25 that matches each clue.



**\_**₩**\_** 

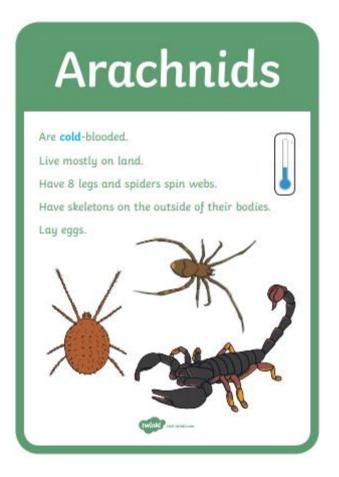
Collect some supermarket receipts. Look for items that cost an amount of money that is a multiple of 25. Write each item and price on the back of this sheet.

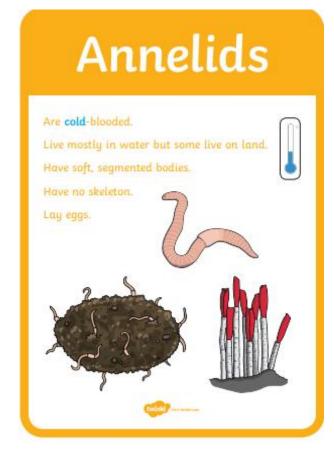


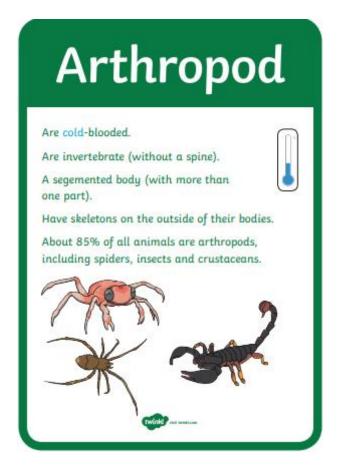


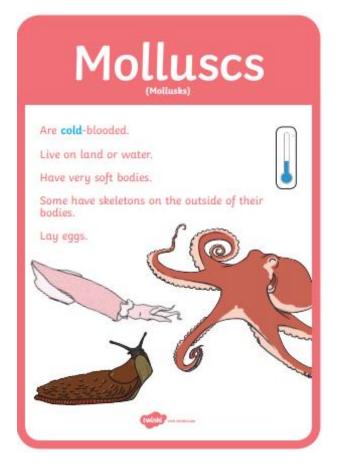




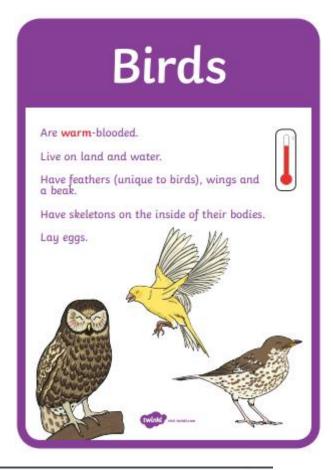




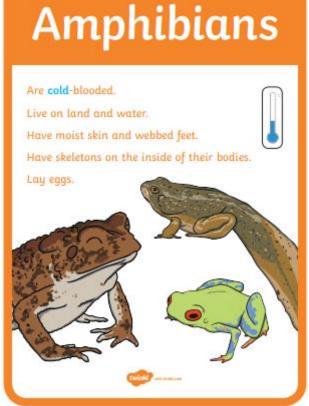


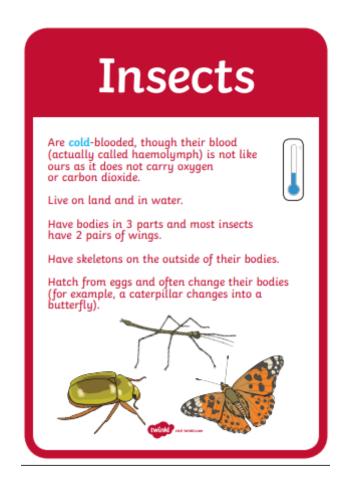


# Are warm-blooded. Live on land and in water. Have hair or fur. Have skeletons on the inside of their bodies. Give birth to live babies which drink their mother's milk.











Day 3 other: Cut out the teeth and try to put them in the correct place in the mouth. Research the jobs of all the teeth and display this in a table.

Teeth Type	Job role
Upper incisors	
Uppor wisdom teeth	
Upper canines	
Lower canines	
Lower molars	
Etc	

# **Human Teeth Cut and Stick**



Upper Incisors





Upper Molars



**Upper Canines** 









Upper Premolars



Lower Wisdom Teeth





Upper Wisdom Teeth

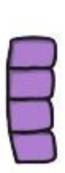


Lower Canines

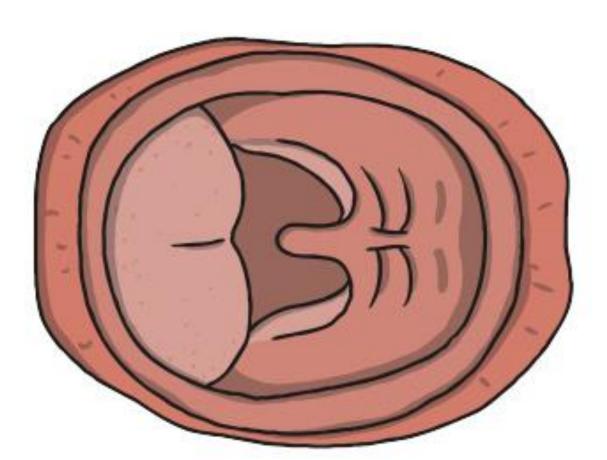


Lower Molars

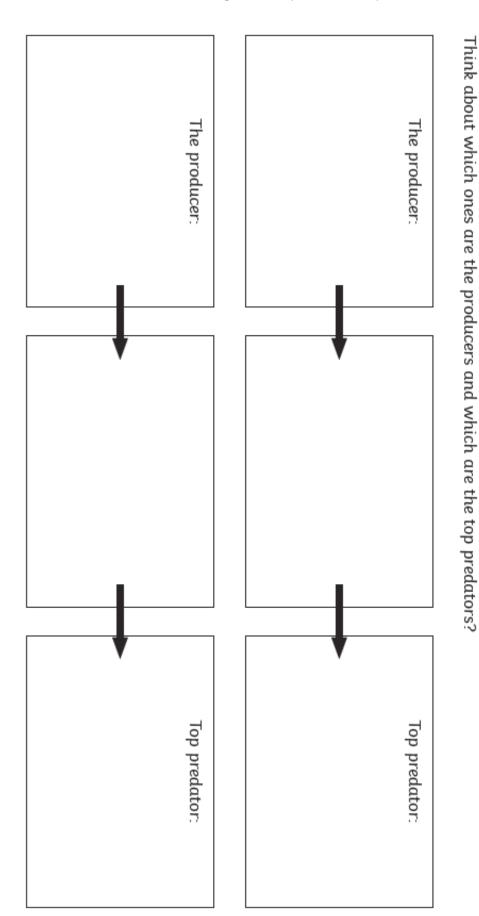
Lower Premolars



Lower Incisors



Day 5: Research food chains, predators, consumers and producer. Complete the worksheet below. Challenge! Can you make your own food chains?



# Food Chains

Make a food chain by cutting out and using the pictures.



