

Home Learning Pack Year 4

Week commencing 6th July 2020



Hi Year 4,

I hope you like my message above, I just wanted to remind you all how amazing I think you have been over the last few months. School has not been the same without you.

I have been in touch with the teachers of your linking classes at Howarth Primary and they have told me that the children really enjoyed receiving and reading the letters you sent just before lockdown. I'm hoping that we will be getting their responses soon. If any of you would like to write a letter or a message to them just send it to the home learning email and I would be happy to pass it on.

It's been lovely reading your emails telling us about what you have been up to, some of you have been so busy! It's not too late to send us some photos or drop us a line showing us what fun you've been having.

It seems such a long time since we've seen each other but, don't worry, September is just around the corner! In the meantime, watch out for Summer Activity Pack to keep you entertained in the holidays!

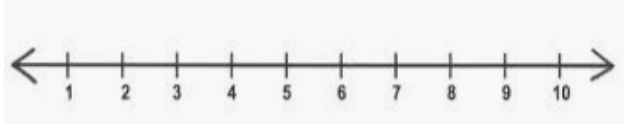
Take care and see you soon,

Mrs Lee, Mr Evans, Mrs Forbes, Miss Parkin and Mrs Wakelin

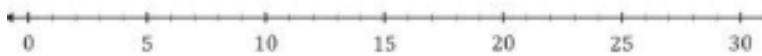
Just like we do at school, why don't you try to do some morning arithmetic activities each day?
Ask a grown up to set you some questions each morning.

This pack will cover some work that we did at school at the beginning of the year. Remember, when you are using number lines, you have to make sure you understand what the space between numbers (intervals) are – the value.

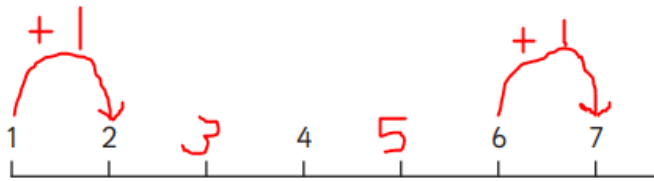
For example, in this number line the space is a value of one:



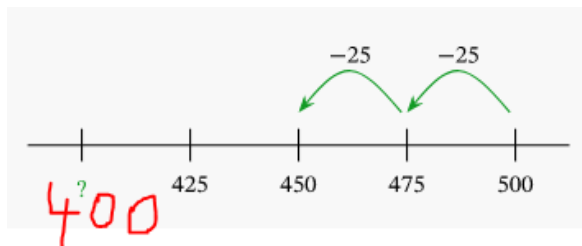
This one goes up in 5s:



When there is a missing number on a number line, you can use the rest of the number line to work it out. In this case, I can see that the other numbers go up in 1s, so I can work out the missing numbers:

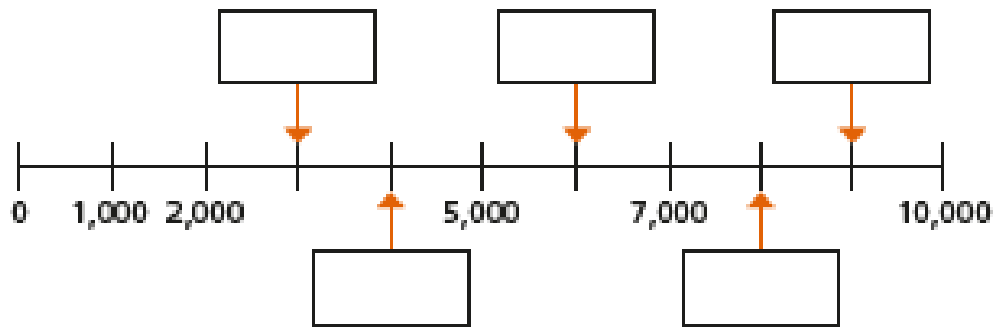


In this number line, I can see that the jumps are a difference of 25:

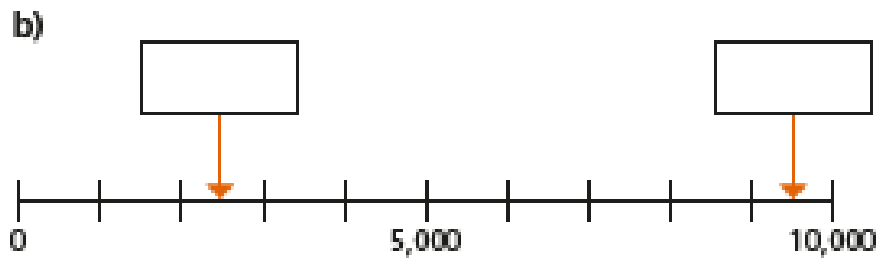
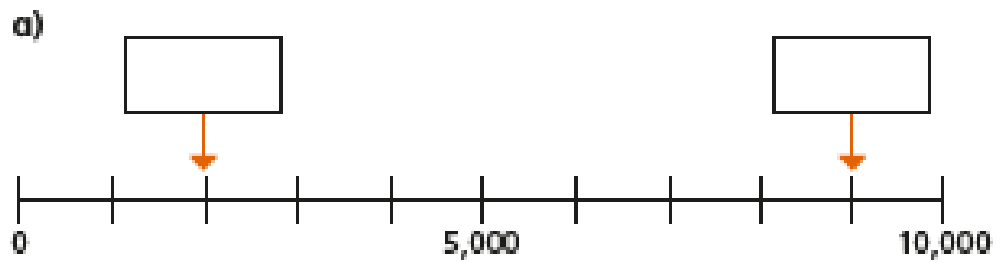


Use this to help you with the following questions.

1 What numbers are the arrows pointing to?

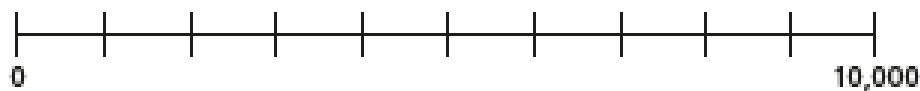


2 What numbers are the arrows pointing to?



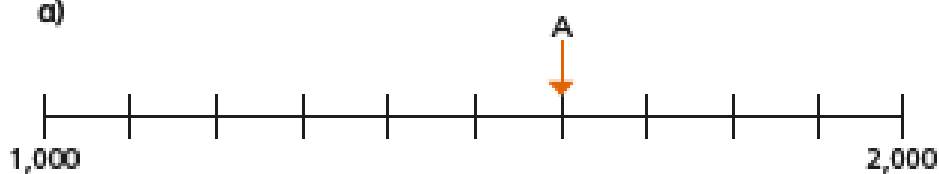
3 Label the number line with these numbers.

3,000 500 5,000 7,000



4 What is the value of A on each number line?

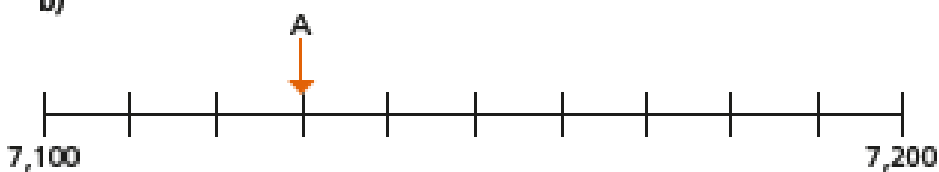
a)



Circle your answer.

5,000 6,000 1,600 1,500

b)

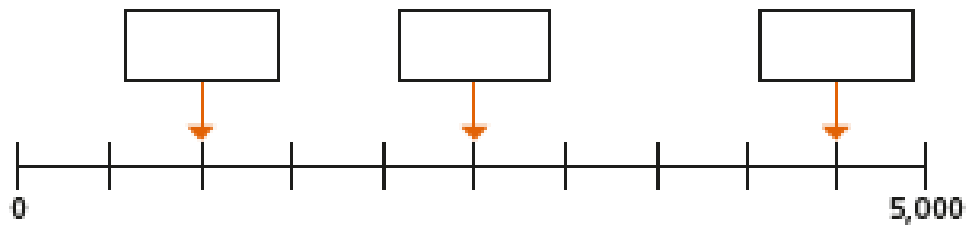


A =

5 Complete the number line.



6 What numbers are the arrows pointing to?



7 a) Estimate the values of A, B and C.



A =

B =

C =

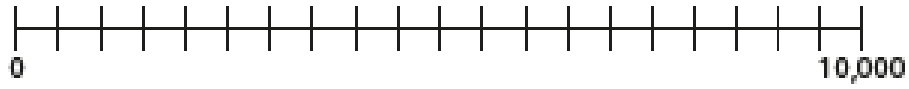
b) D is greater than A but less than B

Write three possible values of D.

8



This number line goes up in thousands.



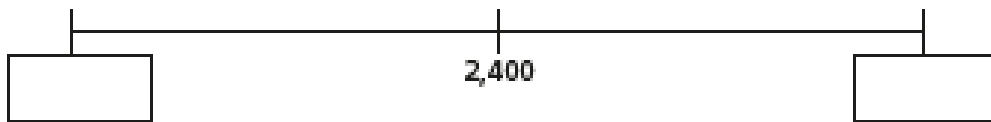
Is Annie correct?

Explain your answer.

9

What could the missing numbers be?

a)

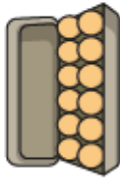


b)



Multiplying and Dividing by 10

Multiplication



- 4 Tom has 10 boxes of eggs.
There are 12 eggs in each box.
How many eggs does he have altogether?

Tom has eggs.

- 5 Complete the sentences.

H	T	O

Each row has ten and ones.

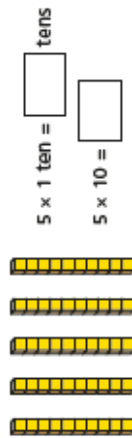
There are rows.

The calculation is × =



Multiply by 10

- 1 Complete the calculation shown in base 10



- 2 Complete the number sentences.

- a) $2 \times 10 =$ d) $7 \times 10 =$
 b) $4 \times 10 =$ e) $10 \times 6 =$
 c) $10 \times 8 =$ f) = 3×10

- 3 Match the bar models to the multiplications.

	5×10
	10×9
	6×10



- 6 Use counters on a place value chart to work out 23×10
 $23 \times 10 = \square$

- 7 Which of these is the odd one out? Tick your answer.

There are 10 teams with 7 players on each team.

There are 10 red flowers and 7 yellow flowers.

There are 7 ten frames with 10 counters in each.

Talk about it with a partner.



- 8 Complete the calculations.

a) $45 \times 10 = \square$

e) $10 \times \square = 140$

b) $36 \times 10 = \square$

f) $\square = 40 \times 10$

c) $\square = 10 \times 78$

g) $32 \times 10 = 10 \times \square$

d) $31 \times \square = 310$

h) $670 = 2 \times 5 \times \square$

- 9 Eva walks 60 m to school.

Teddy walks 10 times as far as Eva to school.

How far does Teddy walk to school?

Teddy walks \square m to school.

- 10 Amir thinks of a 2-digit number.

He multiplies it by 10



My answer is between 755 and 795

Write all the numbers Amir could be thinking of.

- 11 Chocolates come in boxes of 8 and 10




Rosie needs to buy 80 chocolates.

- a) What boxes could Rosie buy?


- b) What is the fewest number of boxes Rosie needs to buy?

Division

Divide by 10



1 Complete the calculation shown by the array.



$40 \div 10 = \square$

2 Complete the calculations.

a) $30 \div 10 = \square$ d) $80 \div 10 = \square$

b) $60 \div 10 = \square$ e) $100 \div 10 = \square$


c) $90 \div 10 = \square$ f) $\square = 120 \div 10$

3 Balloons come in bags of 10

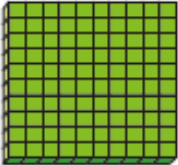
Huan has 130 balloons.


How many bags does he have?

Huan has bags of 10 balloons.

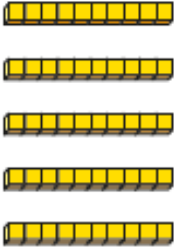


4 a) Whitney makes 150 using base 10





I am going to exchange my hundred for tens



Complete the sentences.

$150 = 1$ hundred + tens

1 hundred = tens

Whitney has tens altogether.

$150 \div 10 = \square$

b) Make 230 using base 10

Complete the sentences.

$230 = \square$ hundreds + tens

hundreds = tens

There are tens altogether.

$230 \div 10 = \square$

- 5 Mr Smith has this amount of money.



He buys some rulers costing 10p each.



Mr Smith spends all of his money.
How many rulers does he buy?

- 6 Aisha has a bag of 10p coins.
She has £3 and 40p altogether.
How many 10p coins does Aisha have?

Aisha has 10p coins.

- 7 Fill in the missing numbers.

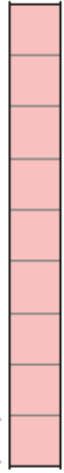
a) $360 \div 10 = \square$ d) $\square \div 10 = 41$
 b) $630 \div 10 = \square$ e) $\square = 75 \text{ tens} \div 10$
 c) $10 \times \square = 520$ f) $86 = \square \text{ tens} \div 10$

- 8 A pool is 10 m long.
Annie and Mo are swimming lengths of the pool.
Annie swims 85 lengths.
Annie and Mo swim 1,240 m in total.
How many lengths does Mo swim?

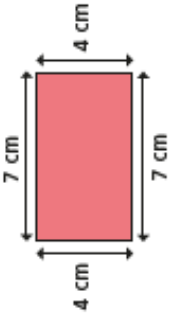
- 9 Complete the calculations.
- a) $360 \div 10 \div 3 = \square$ c) $720 \div 10 \div \square = 8$
 b) $450 \div 10 \div 5 = \square$ d) $\square \div 10 \div 4 = 1$

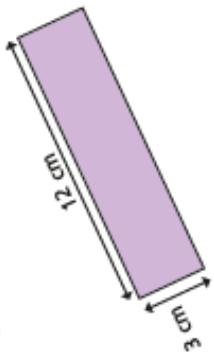
Measurement


The last pack covered perimeter, so here are some more questions for you to have a go with.

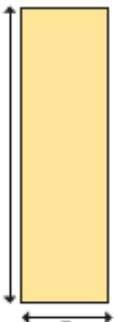
c) 
 1 cm
 1 cm
 □ cm + □ cm + □ cm + □ cm + □ cm = □ cm

2 Work out the perimeter of the rectangles.

a) 
 4 cm 7 cm 7 cm
 □

b) 
 12 cm 3 cm
 □

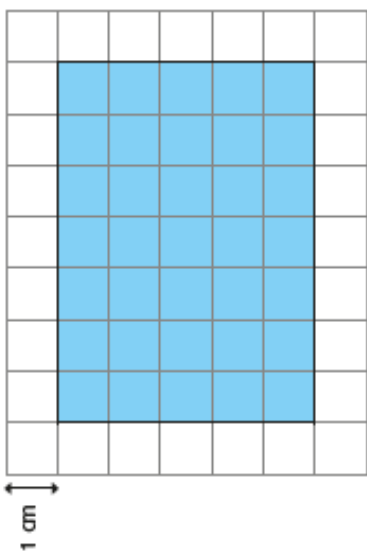
c) 
 4 cm 9 cm
 □

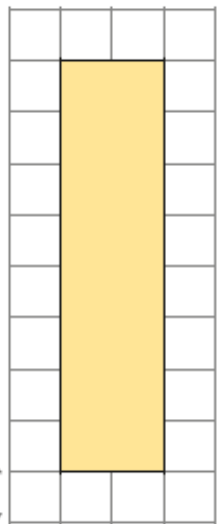
d) 
 2 km 500 m
 □



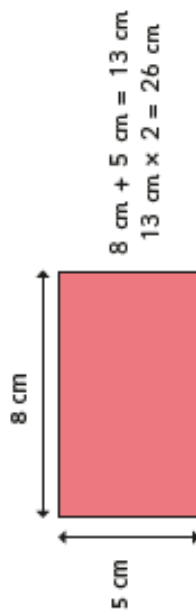
Perimeter of a rectangle

1 Work out the perimeter of each rectangle.

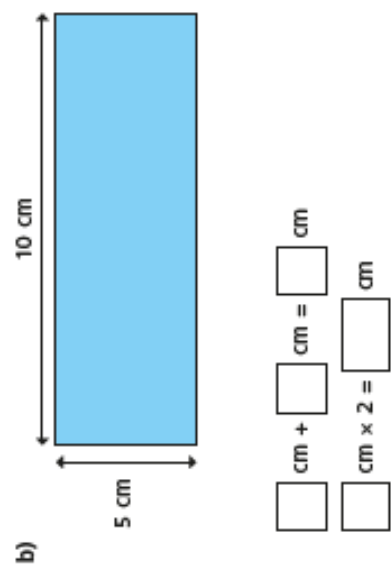
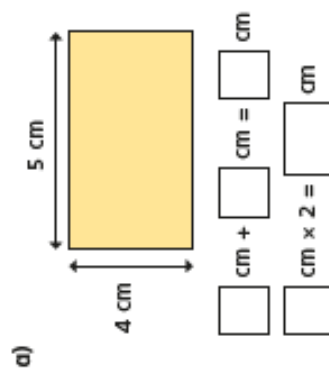
a) 
 1 cm 1 cm
 □ cm + □ cm + □ cm + □ cm = □ cm

b) 
 1 cm 1 cm
 □ cm + □ cm + □ cm + □ cm = □ cm

- 3 Tommy is working out the perimeter of some rectangles.



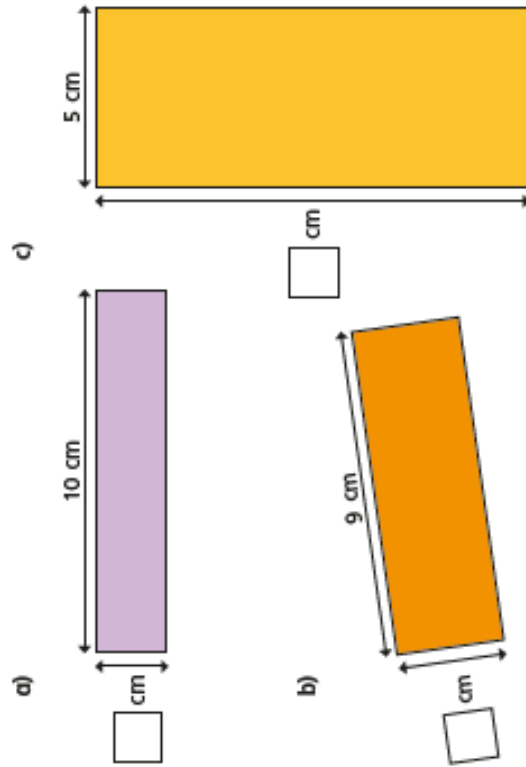
Use Tommy's method to find the perimeter of these rectangles.



- 4 Each lolly stick is 8 cm long.
Find the perimeter of the shape.



- 5 Each of these rectangles has a perimeter of 24 cm.
Work out the missing lengths and label the diagrams.



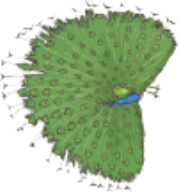



What do you notice?
Find any other rectangles that have the same perimeter.

Every day, BBC Bitesize have an English activity on their daily learning page. Why not have a look each day? You could always try the learning from earlier year groups to remind yourself of work that you have done before.

GPS mats

Here are some sheets for you to remember all the things we have learnt over the year:

1.

<p>a</p> <p>Can you spot two mistakes in this sentence? Underline them and explain why they are incorrect.</p> <p>As it proudly strutting along, the peacocks feather's were a fabulous sight.</p> 	<p>c</p> <p>Add a suitable fronted adverbial to this sentence. Don't forget to add a comma after your phrase to separate it from the rest of the sentence.</p> <p> _____ the weathervane spun wildly.</p>	<p>e</p> <p>Add suitable pronouns or noun phrases in the gaps:</p> <p>Louisa needed to get home as quickly as possible - _____ didn't want to miss her favourite TV show.</p> <p>Deer are herbivorous animals - _____ only eat plants.</p>
<p>b</p> <p>Can you think of words ending in the suffix -ation that match these definitions?</p> <p>Getting things ready and organised.</p> <p>_____</p> <p>Carefully watching something (e.g. in a science experiment).</p> <p>_____</p>	<p>d</p> <p>Mr Whoops has accidentally jumbled up a pair of homophone words. Can you help him to unjumble them?</p> <p>ceepi accpe</p> <p>_____</p> <p>_____</p> 	<p>f</p> <p>Add suitable determiners back into these sentences:</p> <p>_____ healthy salad makes a delicious and nutritious lunch.</p> <p>Why not add _____ egg for extra protein?</p> <p>For a healthy dessert, try adding _____ pot of natural yoghurt to some fresh fruit.</p> 

2.

a

Underline the verbs in these sentences.

During the downhill final, the Norwegian skier had a successful run. She swooped around the flags and only knocked one of them over. As she crossed the finish line, she held her arms aloft.



b

Can you think of the sub- prefix words to match these definitions?

an underwater vessel
sub _____

an organisational feature used in information texts
sub _____

c

Join the prefixes to the correct root words:

inter-	market
super-	pilot
auto-	national

Now, use **one** of the words you have made in **one** direct speech sentence.

c

Can you underline all of the determiners in these sentences?

The dimorphodon was a flying dinosaur that lived in prehistoric times.



d


Write a present progressive sentence about this picture that also has a fronted adverbial. Don't forget your comma.



f

Mr Whoops has been juggling with the letters from one of his Y4 spelling words. Can you spot what it is?

t a r h i s g s t



3.

a

Add a sensible subordinate clause to this sentence. Circle the subordinating conjunction that you have used:



The children organised themselves into teams

b

Place the plural possessive apostrophe correctly in this sentence:

The childrens lunchboxes and drinks were left on the coach.

c


Put ticks in the correct boxes:

	expanded noun phrase	main clause	subordinate clause
before the sun came up			
a crunchy, red apple			
since he was only 4 years old			

e

Mr Whoops has made **two** clumsy spelling mistakes in his sentences. Can you underline them and correct them?

Mr Green, my next door naybour, is a very kind man. He lives at number eyght.



d


Circle **all** of the determiners in this sentence:

During the zoo visit, they saw many monkeys and an antelope.

4.

a

Place a comma after the fronted adverbial in the sentence and then underline the subordinate clause.



With his arms outstretched the evil pea shouted at the shocked crowd before he flew off into the night.

b

Think of **two** different adverbs that could describe this verb:


“What was that noise?” asked the boy _____.

“What was that noise?” asked the boy _____.

Add a conjunction to one of the sentences and add more detail.

c

Clumsy Mr Whoops has lost all the words from this word family. Can you help him to find **three** of them?



cent

d


Can you fill the spaces using the correct word?
(there/their/they're)

- They put on _____ coats.**
- _____ was a squirrel in the garden.**
- “ _____ playing well today!” said the coach.**

Why has an apostrophe been used in the word 'they're'?

f

Explain the **two** things that are wrong with these sentences and correct them.



The yoga instructor are demonstrating the pose to the class. Yoga can have a great affect on a person's flexibility.

e

Tick all the sentences that contain a conjunction.

After he had breakfast, Clinton set off for school.

He ate a chocolate mousse after his sandwich.

During playtime, he ate an apple from his lunchbox.

5.

a



Add the missing verbs to these sentences so that they are grammatically correct.


Heading for the supermarket, the Fairtrade bananas _____ packed onto the haulage lorry. The lorry driver _____ ready to set off.

b



Can you write a sentence containing a plural possessive apostrophe about these soldiers?

d



Mr Whoops has got in a terrible muddle with his 'ch' words that sound like a 'k'. Can you help him to match each definition with the correct word?

<input type="text"/>	the repeating part of a song
<input type="text"/>	you might hear one of these inside a cave
<input type="text"/>	a person in a book or film

c

Join the prefixes to the correct root words:

re-	practical
im-	obey
dis-	arrange

Now, use one of the words you have made in a direct speech sentence:

f

Rewrite this sentence with the subordinate clause at the beginning. Don't forget the comma!



The crisps were strewn all over the carpet as the toddler had dropped them.

e

Sort these words into the table:


determiners	prepositions
<input type="text"/>	<input type="text"/>

during opposite nine many

Add another word to each column.

6.

a



Can you write Lily's words as an accurately-punctuated direct speech?
Let me try! said Lily as she clicked the mouse.

b

Can you think of a word that ends in -ture to match these definitions?

items in your home - **f** _____


a fun journey - **a** _____

c

Mr Whoops has accidentally jumbled up **two** -ous suffix words. What are they?

u d o g e r s n a

m n d t e e r o s u



d


Rewrite these sentences in present perfect tense:

I went to the supermarket.

Lewis drew a picture.

e

Up-level this sentence by adding an expanded noun phrase and an extra subordinate clause.



The fish was on sale at the shop.

f

Insert the correct speech punctuation into these sentences.

Daniel called, Are you ready?

The captain commanded, Drop to the floor!

In Science, our topic is all about Living Things

Here is a new knowledge organiser for the next part of the topic.

Key Vocabulary	
digest	Break down food so it can be used by the body.
oesophagus	A muscular tube which moves food from the mouth to the stomach.
stomach	An organ in the digestive system where food is broken down with stomach acid and by being churned around.
small intestine	Part of the intestine where nutrients are absorbed into the body.
large intestine	Part of the intestine where water is absorbed from remaining waste food. Stools are formed in the large intestine.
rectum	Part of the digestive system where stools are stored before leaving the body through the anus.

Human Teeth and Their Functions	
incisor bites and cuts	canine tears and rips
	molar grinds
	premolar holds and crushes

Key Knowledge	
The Digestive System	

Key Knowledge		
The teeth of an animal are designed to eat different foods depending on the diet of the animal. Examples of a herbivore , a carnivore and an omnivore skull:		
Elephant - herbivore 	Lion - carnivore 	Human - omnivore
An Example of a Food Chain The arrows in a food chain show the flow of energy.		

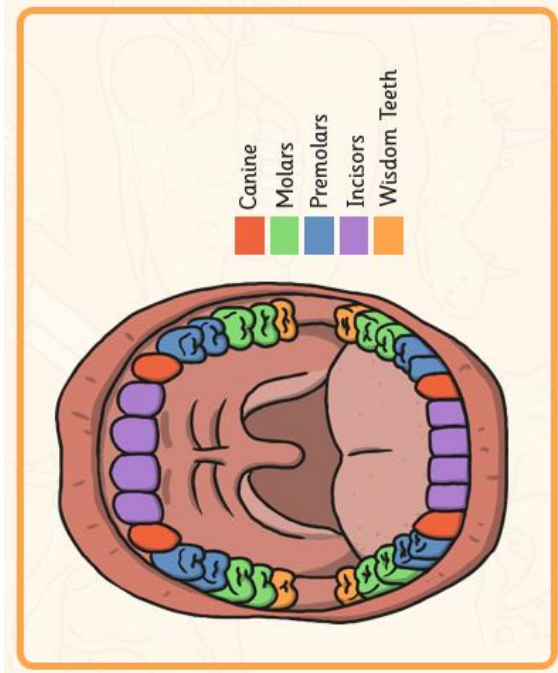
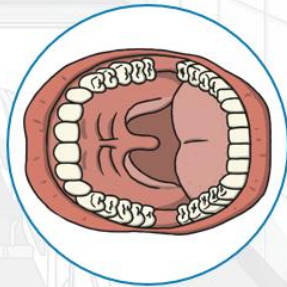
Key Vocabulary	
herbivore	An animal that eats plants.
carnivore	An animal that feeds on other animals.
omnivore	An animal that eats plants and animals.
producer	A plant that produces its own food.
predator	An animal that hunts and eats other animals.
prey	An animal that gets hunted and eaten by another animal.

To help prevent tooth decay:	
<ul style="list-style-type: none"> limit sugary food and drink; brush teeth twice daily using a fluoride toothpaste; visit your dentist regularly. 	

This pack will concentrate on teeth in humans and other animals.

Teeth

I can feel that my teeth are different. Some are thin and quite sharp, others are thicker and have ridges along them.



Incisors

How many?

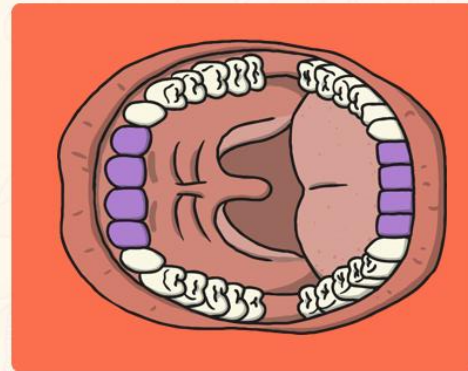
Humans have 8 incisors altogether; 4 in the upper jaw and 4 in the lower jaw.

Shape

Incisors are shovel-shaped.

Function:

Used for biting and cutting food.



Canines

How many?

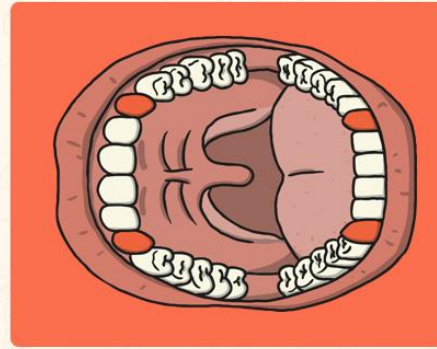
Humans have 4 canine teeth, one in each quarter of the mouth, on either side of the incisors.

Shape

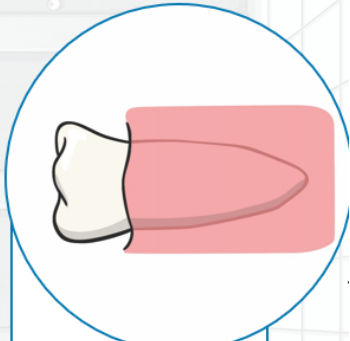
Canines are pointy.

Function:

Used for tearing and ripping food.

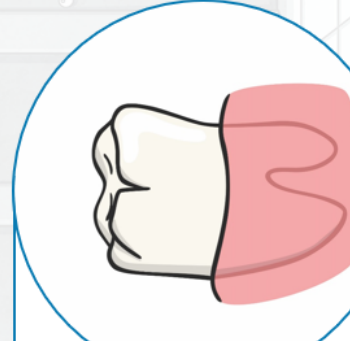


Premolars and Molars



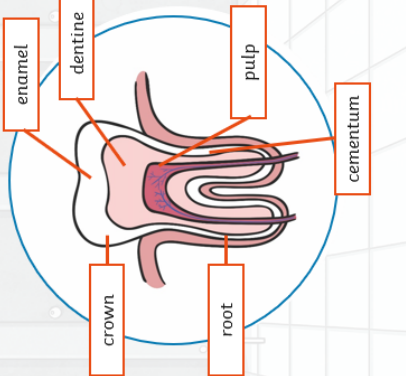
Premolars and molars are towards the back of your mouth. They are bigger and wider than incisors and canines and this is because of their functions. Premolars are used for holding and crushing food. At the very back of the mouth, are molars (bigger versions of premolars). They chew and grind up food, working with your tongue to prepare food for swallowing.

Wisdom Teeth



Wisdom teeth are an extra set of molars at the very back of the mouth. Despite their name, wisdom teeth are nothing to do with being clever! Scientists think wisdom teeth come from a very long time ago, when our ancestors ate a diet of coarser, rougher food. They needed an extra set of molars to chew up the food. Over time, humans' diets have changed and now wisdom teeth have no function. Wisdom teeth usually emerge in adults when they are around 18 years old or older.

Inside a Tooth



crown – The part of the tooth above the gum that you can see.
root – The part of the tooth hidden under the gum.
enamel – The shiny, white surface of a tooth. Enamel is the hardest substance in the human body.
dentine – A hard substance which protects the inside of the tooth.
pulp – The part of the tooth which contains blood vessels and nerves. The blood vessels keep the tooth alive. The nerves send messages to your brain, for example whether you are eating something very hot or very cold.
cementum – The layer which covers and protects the root of the tooth.

Why Do We Need to Care for Our Teeth?



My little sister has just lost one of her teeth, but that's alright because it is one of her milk teeth. She will have an adult tooth grow in its place. If I lose one of my teeth, I won't have another one grow in its place. I need to look after my teeth!

When a shark loses a tooth, another one always grows in its place. A shark may get through 20,000 teeth!

Did You Know?

Use this information given to fill in the labels on this scientific diagram:

Name of tooth:

Function:

Name of tooth:

Function:

Name of tooth:

Function:

Name of tooth:

Function:

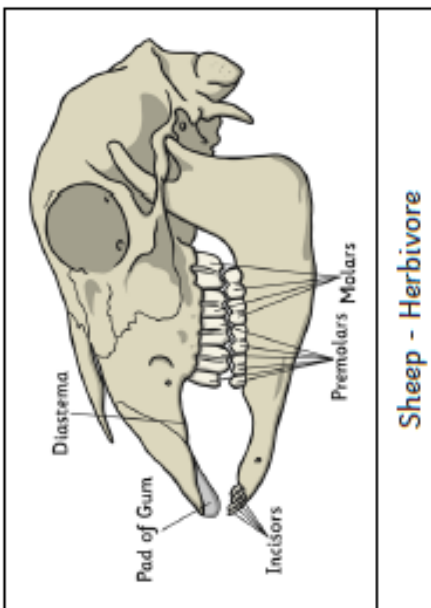
Name of tooth:

Function:

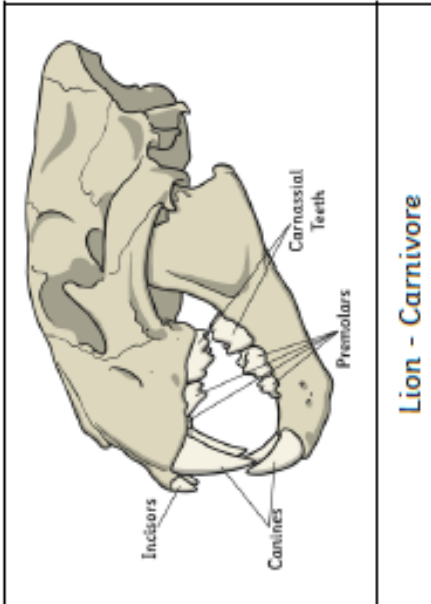
Key:

- Canines
- Molars
- Premolars
- Incisors
- Wisdom Teeth

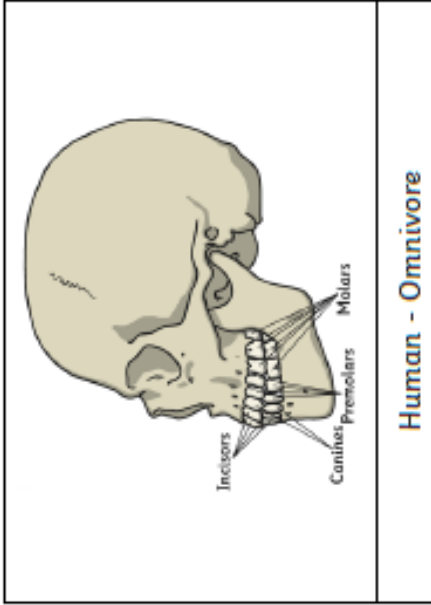
Different animals have different teeth depending on what type of diet they have; whether they are herbivores, carnivores or omnivores. Complete the activity to compare different animal teeth. Remember to think carefully about the job of each kind of tooth.



Sheep - Herbivore



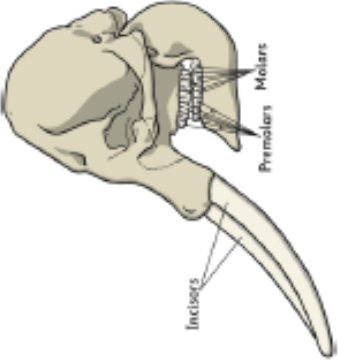
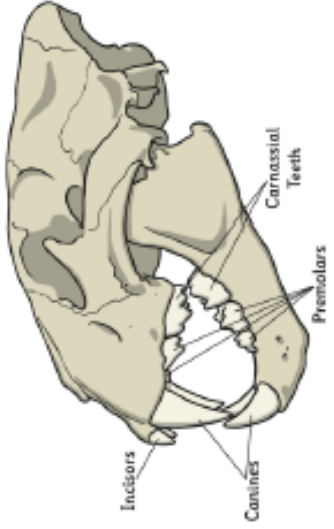
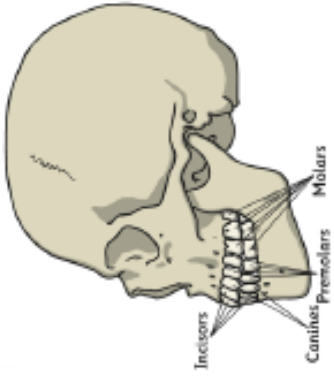
Lion - Carnivore



Human - Omnivore

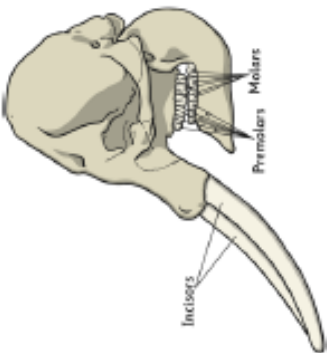
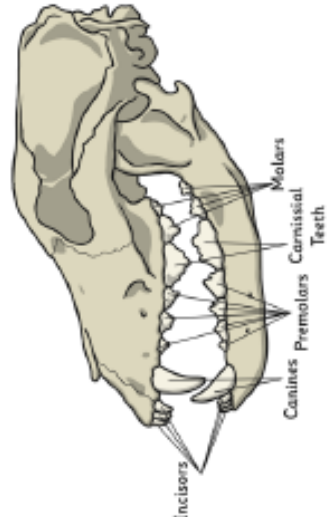
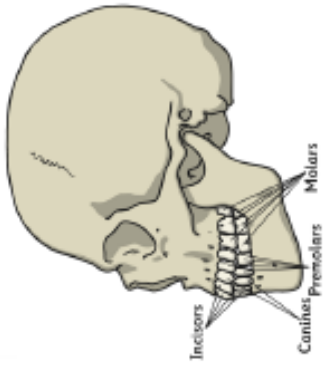
Do all three have any teeth that are the same? Which type of teeth?

Why do you think they have the type of teeth that you stated above in common?

	<p>Elephant - Herbivore</p>
	<p>Lion - Carnivore</p>
	<p>Human - Omnivore</p>

What are the differences in the type of teeth these animals have?

What would happen if the lion had teeth like an elephant?

	<p>Elephant - Herbivore</p>
	<p>Dog - Carnivore</p>
	<p>Human - Omnivore</p>

Are there any types of teeth that all three have in common? Why do they have these in common?

Explain any differences that you have found between the types of teeth the animals have:

The Queen's Birthdays

Why Does the Queen Celebrate Two Birthdays?

The tradition of two royal birthdays was started by George II in 1748. He was born in November and he felt that the weather would be too cold for his annual birthday parade on his actual birthday. A solution to this was to celebrate his birthday with a military parade, called Trooping the Colour, held every spring. This tradition has continued ever since – no matter what month the King or Queen was born. This is the monarch's official birthday.



Earlier on in her reign, our Queen celebrated her official birthday on a Thursday, but it was later changed to the second Saturday in June. Other countries of the Commonwealth (nations in the world that The Queen reigns over) celebrate at different times too, but mostly during the months of May and June.

Royal Facts

1. **Name:** Elizabeth Alexandra Mary
2. **Born:** 21st April 1926
3. **Job:** Queen Elizabeth II reigns as the Queen of the United Kingdom of Great Britain and Northern Ireland and many of the Commonwealth countries.
4. The Queen celebrates two birthdays every year; one on 21st April (her actual birthday) and one on the second Saturday in June (her official birthday).
5. Since September 2015, Her Majesty is the United Kingdom's longest reigning monarch (king or queen). The Queen entered the record books as Britain's longest-reigning monarch after surpassing the reign of her great-great grandmother, Queen Victoria.



The Queen's Birthdays

Birthday Traditions and Ceremonies

21st April (The Queen's actual birthday) is usually spent privately with her family and close friends. But the occasion is marked by a 41 gun salute in Hyde Park, a 21 gun salute in Windsor Great Park and a 62 gun salute at the Tower of London. On the second Saturday in June, her official birthday is celebrated with the colourful Trooping the Colour parade from Buckingham Palace, down The Mall and finishing at Horse Guards Parade. Her majesty returns to the balcony of Buckingham Palace to wave to the crowds that have gathered to wish her well.



Glossary

A gun salute: A gun salute is a mark of respect for special royal celebrations. The number of rounds (or blasts) depends on the place and the occasion. The basic salute is 21 rounds; in Hyde Park and Green Park an extra 20 rounds are added because they are royal parks. There is a 62 gun salute at the Tower of London because it is a royal palace and fortress. Gun salutes are usually fired at midday.

Trooping the Colour: During the ceremony, The Queen inspects the troops who have paraded for her. The bands play and the soldiers march, along with horses and the Regimental Colour (banner). It is a colourful celebration and thousands of people line the pavements of The Mall to enjoy the sight. For many years, The Queen rode her horse, Burmese, with her troops, but more recently she has ridden in a carriage. During the parade in 1981, Marcus Serjeant aimed a pistol at Her Majesty as she rode from Buckingham Palace down Horse Guards Parade for the beginning of the Trooping the Colour ceremony. Six blank cartridges were fired before he was tackled by a guardsman and police. The Queen continued with the parade.



Questions:

Answer in full sentences where appropriate.

1. On which date was Queen Elizabeth born?

2. Which month is the Queen's actual birthday and which month is the Queen's official birthday?

3. Which queen did Queen Elizabeth II pass as the longest reigning British monarch in September 2015? What relation was that queen to Queen Elizabeth?

4. Why does the Queen celebrate two birthdays?

5. Why do you think the Queen's birthday celebrations were changed from a Thursday to a Saturday?

6. What are the three main location for the trooping of the colour?

7. Do you think there are any disadvantages to having two birthdays? Give reasons for your answers.

8. Why do you think the Queen continued with the parade after she was shot at in 1981?

9. What are the titles called that separate each part of the fact file?

10. If you were in charge of planning the Queen's birthday celebrations, what three activities do you think she would enjoy? Give reasons for your choices.

Victorian Inventors

Open the history files and discover more about two great Victorian inventors who continue to shape our lives today.

Name: Alexander Graham Bell

Most Famous Invention: Telephone

Alexander Graham Bell was born in Scotland on 3rd March 1847. He was a scientist, inventor and engineer.



Alexander was the son of Professor Alexander Melville Bell and Eliza Grace Symonds. As a young child, he always wanted to know more about the world around him and tried to solve problems by inventing new things. At just 12 years old, Alexander invented a machine to remove the outer case from grains of wheat. The owner of the mill was so happy with his invention that he let Alexander have a small workshop that he could work on his inventions in.

Alexander spent many years experimenting with the different ways that sound can travel – especially using electricity. In 1875, Alexander found an assistant called Thomas Watson. Together, they worked on creating what is now called the telephone.

On 9th October 1876, Alexander and Thomas talked to each other on the telephone for the first time. They were over two miles away from each other. In 1877, Alexander started his own telephone company and his invention became famous around the world.

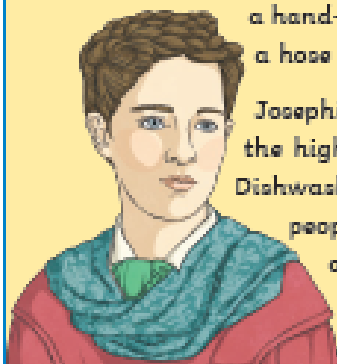
Name: Josephine Garis Cochrane

Most Famous Invention: Dishwasher

Josephine Garis Cochrane was born in Ohio, USA, on 8th March 1839. She was the daughter of John Garis, an engineer, and Irene Fitch Garis. Josephine's grandfather John Fitch was an inventor too – he had already invented a new type of steam-powered boat.

After getting married, Josephine and her husband William bought a house and began inviting their friends round for dinner. During one of their dinner parties, Josephine's expensive dishes were chipped whilst being washed. This made Josephine want to think of a safer way of washing her valuable dishes.

Josephine worked in her tool shed with George Butters, a mechanic. Together, they created a hand-powered dishwasher. The dishes were held safely in a rack whilst a hose of hot, soapy water sprayed and cleaned them.



Josephine showed her invention at a world gathering in 1893. She won the highest prize for her new creation and began to sell the Cochrane Dishwasher to hotels and restaurants across Illinois, USA. Soon, so many people wanted a Cochrane Dishwasher that Josephine opened her own factory in 1897. Her invention became famous across the globe.

Glossary

assistant: A person who helps with particular work.

engineer: A person who designs or builds engines or machines.

mechanic: A skilled worker who fixes vehicles, engines and machines.

Questions:

1. How old was Alexander Graham Bell when he created his first invention? Tick one.
 - a. 12
 - b. 15
 - c. 20
 - d. 32

2. Number the events below to show the order they happened in Josephine Cochrane’s life. The first one has been done for you.

	<i>She worked in her tool shed to invent the dishwasher.</i>
1	<i>She was born in Ohio, USA.</i>
	<i>She opened her own factory.</i>
	<i>Josephine’s expensive dishes became chipped.</i>
	<i>Josephine won a prize for her invention.</i>

3. Join the boxes to match the name of the person to their role.

<i>Eliza Grace Symonds</i>
<i>Thomas Watson</i>
<i>Irene Fitch Garis</i>

<i>Alexander Graham Bell’s assistant</i>
<i>Josephine Cochrane’s mother</i>
<i>Alexander Graham Bell’s mother</i>

4. Find and copy a word from Josephine Cochrane’s fact file that means the same as **expensive**.

5. Alexander Graham Bell was an engineer. Explain what is meant by the word **engineer**.

6. Who was George Butters?

7. Why was Alexander Graham Bell’s invention so important?

8. Explain how Josephine Cochrane’s invention still impacts life today.

As part of our “Who am I?” topic, we are going to look at famous artists who have done portraits and self-portraits. This pack will look at John Singer Sargent.

John Singer Sargent

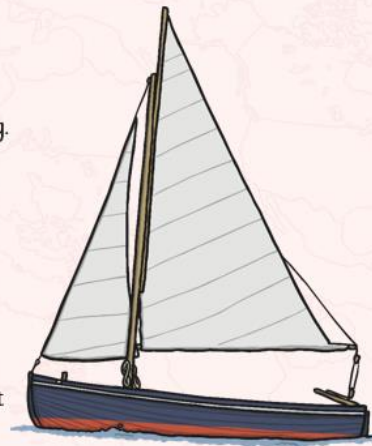


John Singer Sargent (1856-1925)

Singer Sargent painted a lot of full length portraits. He was very popular but still very shy. He was famous for showing people with interesting expressions on their faces. This makes it fun to guess what you think the people in his portraits are thinking and feeling.

When Singer Sargent was younger, he hated studying. He was bad at sitting still. He preferred climbing and exploring.

Both of his parents were talented artists. His parents encouraged him to sketch. He most enjoyed sketching boats. This made Singer Sargent's father think that his son might want to be a sailor.



John Singer Sargent

(1856-1925)

As soon as Singer Sargent knew that he was going to paint someone's portrait, he would visit the person's home to see where the painting was going to hang. Then he would choose the clothes that the person should wear. As he painted, he never drew on the canvas first, he always painted straight onto the surface.

He asked the person to sit for him eight to ten times before he had finished a portrait. As the person sat for him, he would have a friendly conversation and sometimes he would stop to play the piano.

After meeting Monet in France, Singer Sargent started doing some painting outdoors.



Looking at Paintings



Look at your image.

What can you see in the picture?

Look at the painting. What kind of life do you think this person has? Look for clues.

How does the picture make you feel?

What colours can you see in the picture?

Why do you think the artist painted it?





A Dinner Table at Night, 1884
by John Singer Sargent



Carnation, Lily, Lily, Rose, 1886
by John Singer Sargent



Frederick Law Olmsted, 1895
by John Singer Sargent



Dr. Pozzi at Home, 1881
by John Singer Sargent



The Fountain, Villa Torlonia, Frascati, Italy, 1907
by John Singer Sargent



Portrait of Edouard and Marie-Louise Pailleron, 1881
by John Singer Sargent



Study for Lady Macbeth
by John Singer Sargent

Making Half Pictures Whole



Your job is to make a half portrait whole again.

Look at the bit that Singer Sargent has already painted.

Use the whole painting to help you.

Look at your 'half painting' and use the original painting to complete the missing half.











When you are at home all the time, it is really important to look after yourself both mentally and physically. Here are some ideas of how you might do that:

20 Screen-Free Activities for Home Learning



Build Something

Use building blocks, recycled materials, chairs, a deck of cards or anything else you can find to build a den, a tower, a vehicle or a robot.

Play a Board Game

Dig out your board games and have fun playing with the family. You could even design and make your own board game.



Keep a Diary

Write a paragraph every day about something you have done. Try to make it as interesting as possible.

Read, Read, Read!

Try to read a little every day. Reread old favourites or pick up that book you've never opened. Read to yourself, an adult or a sibling. Perhaps, you could write a book review to recommend it to someone else.



Puppet Show

Make stick puppets or sock puppets of characters in your favourite story. Use them to put on a puppet show for someone you live with.

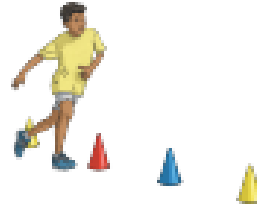


Get Outside

If you have a garden, try to get outside for some fresh air every day. Set yourself a challenge to become more active, such as skipping with a rope for five minutes non-stop. Try to increase the time you spend on the activity each day.

Obstacle Course

Using objects from around the house or in the garden, set up an obstacle course. Challenge your family to see who can complete it in the shortest time.



Be a Nature Spotter

Start a nature survey. Jot down how many different birds, flowers or insects you can spot outside. Record your results in a tally chart.

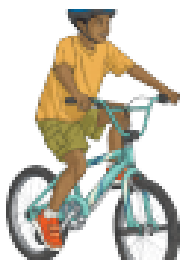
Make a Story Sack

Choose a favourite book and collect some items in a bag that have something to do with the book. Can someone else guess the book based on the items you have collected?



Sketch a Portrait

Have someone in your family sit for you while you draw their portrait. Can you do the whole family? Why not find a mirror and do a self-portrait? Maybe you can even catch a pet sleeping and draw them.

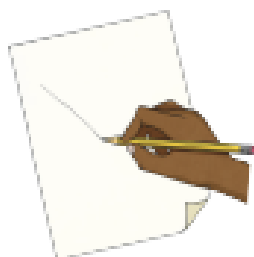


Teach Yourself a New Skill

Now's the time to practise that skill you've always wanted to learn, such as keepy-uppies, riding a bike, learning a language or knitting. The list of new skills is endless!

Cooking

Follow a recipe to make something tasty. Remember, you may need adult supervision. Cooking is a fun way to practise following instructions, weighing and measuring.

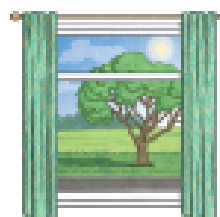


Draw a Map

Draw a map of the rooms in your house or of your local area. Include interesting landmarks or objects. Perhaps, you could turn it into a treasure map and write some clues. Can someone else solve the clues and work out where the 'treasure' is hidden?

Become a Landscape Artist

Look out of a window and draw what you can see. Draw the same view at different times of the day. What changes do you notice?



Get Creative with Words

Write a poem, song or rap about something you enjoy. Perhaps, you could change the words to a popular song or write an acrostic poem about your pet.



Dance, Dance, Dance!

Make up a dance routine to your favourite pop song. Try teaching it to someone else.

Write a Postcard

Write a postcard or a letter to a friend or relative. Tell them about all the activities you have been doing. Try to make it as interesting as possible. You could arrange with a friend to write to each other.



Investigate Capacity

Get a collection of containers, such as cups, saucepans, egg cups and bowls. Estimate how many smaller containers it takes to fill a larger one, e.g. how many egg cups of water it takes to fill a saucepan. Try it out and see if your estimate was close. Use the water on household plants or in the garden so it doesn't go to waste.

Make a Nature Collage

Collect natural objects found outside, such as leaves, twigs, pine cones and flowers. Create a scene by using them to make a collage.



Help Nature

Make a bird feeder with a pine cone, lard and birdseed to hang up outside or make a bughouse for your garden. Keep watch and see how many animals come to visit.

On the next few pages are some summer themed activity sheets for you to do. Enjoy!

Multiplication and Division Facts

Summer Mosaic

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

yellow = 1 - 6 | blue = 7 - 18 | red = 19 - 39 | green = 40 - 65 | black = 66 - 96

$72 \div 8$	$33 \div 3$	$27 \div 3$	$80 \div 8$	4×3	$36 \div 3$	$80 \div 8$	$21 \div 3$	$36 \div 4$	$24 \div 3$	1×8
$30 \div 3$	$36 \div 3$	10×8	12×8	$24 \div 3$	$21 \div 3$	8×8	11×4	12×4	6×8	10×4
$44 \div 4$	9×8	1×8	$36 \div 4$	10×8	$33 \div 3$	6×8	$32 \div 4$	3×4	$72 \div 8$	10×4
11×8	$27 \div 3$	$72 \div 8$	$24 \div 3$	$21 \div 3$	11×8	11×4	5×8	6×8	8×8	7×8
12×8	3×3	$21 \div 3$	$36 \div 3$	4×3	9×8	$36 \div 4$	$64 \div 8$	12×4	$30 \div 3$	$56 \div 8$
7×4	4×8	8×3	4×4	3×8	9×3	$33 \div 3$	$28 \div 4$	5×8	$72 \div 8$	$44 \div 4$
2×8	7×3	11×3	9×3	12×3	$36 \div 4$	$27 \div 3$	$8 \div 1$	11×4	$21 \div 3$	1×8
$12 \div 3$	12×3	8×4	11×3	6×4	$40 \div 8$	12×4	8×8	5×8	7×8	11×4
$4 \div 4$	4×8	8×3	3×8	3×8	$24 \div 8$	5×8	10×4	6×8	12×4	5×8
1×4	7×3	9×4	12×3	10×3	$8 \div 8$	$12 \div 4$	11×4	7×8	8×8	$48 \div 8$
2×3	$48 \div 8$	$20 \div 4$	$3 \div 3$	$16 \div 8$	$16 \div 4$	$15 \div 3$	$20 \div 4$	$32 \div 8$	1×4	$20 \div 4$

Summertime Addition and Subtraction Maths Mosaic

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

green = 7200 | pink = 7500 | black = 7800 | blue = 8100 | yellow = 8400

$2650 + 5450$	$9972 - 1872$	$1788 + 6612$	$5509 + 2811$	$8369 + 31$	$9959 - 1559$	$1528 + 6872$	$757 + 7343$	$7619 + 481$
$2107 + 5993$	$6475 + 1925$	$4660 + 3740$	$2461 + 5939$	$8417 - 17$	$958 + 7442$	$6194 + 2206$	$9859 - 1459$	$9526 - 1426$
$5959 + 1841$	$8263 - 463$	$1171 + 6629$	$715 + 7085$	$4865 + 2935$	$3101 + 4699$	$5518 + 2282$	$1036 + 6764$	$4399 + 3401$
$9584 - 1184$	$7554 + 246$	$6999 + 801$	$677 + 7123$	$5590 + 2810$	$8688 - 888$	$9892 - 2092$	$333 + 7467$	$9860 - 1460$
$4334 + 4066$	$1577 + 6823$	$1920 + 5880$	$1787 + 6613$	$5588 + 2812$	$8370 + 30$	$8360 - 560$	$4335 + 4065$	$1576 + 6824$
$9270 - 870$	$7308 + 1092$	$3886 + 4514$	$8703 - 303$	$6238 + 2162$	$7083 + 1317$	$3591 + 4809$	$1162 + 7238$	$4200 + 4200$
$7787 + 613$	$7787 + 613$	$3886 + 4514$	$8703 - 303$	$7308 + 1092$	$7787 + 613$	$3073 + 5327$	$7456 + 944$	$6726 + 1674$
$3979 + 4421$	$8434 - 34$	$5927 + 1573$	$5124 + 2376$	$6329 + 1171$	$8233 - 733$	$8899 - 1399$	$3980 + 4420$	$9335 - 935$
$6967 + 233$	$3887 + 4513$	$8704 - 304$	$1042 + 6458$	$1964 + 5536$	$8825 - 1325$	$5589 + 2811$	$8360 + 40$	$2546 + 4654$
$1827 + 5373$	$658 + 6542$	$6475 + 1925$	$4660 + 3740$	$2461 + 5939$	$8417 - 17$	$958 + 7442$	$3043 + 4157$	$4380 + 2820$

Guide to maths vocabulary

In the Year 4 National Curriculum, children are taught to use **column addition** and **column subtraction** to add and subtract 4-digit numbers (including decimal numbers in contexts such as money). The focus of the curriculum is that children will become 'masters' of this method and should be able to apply this method to a range of problems and situations. Therefore, the range of activities in this book will help your child develop their **fluency**, **reasoning** and **problem solving** when using **column addition** and **column subtraction**.

The Column Method

The column method of addition and subtraction is so called because it sets the numbers out into columns based on their place value, e.g. **Hundreds, Tens, Ones**, tenths etc. (**Note:** If your child isn't secure with place value, it is best to go over this before completing column addition and subtraction.) To begin this method, we always start by adding or subtracting the numbers in the right column and then work along to the left, adding or subtracting the numbers in that column.

When using column subtraction, the **largest number (whole)** is always placed above the **smaller number (part)**. Also, you must always subtract the digit below from the number above; this is sometimes a common misconception with children as they sometimes calculate the difference between the two numbers.

Borrowing vs Exchanging: During school, you were probably taught to 'borrow' from the next column if you couldn't subtract the bottom number from the top number in a column. However, the current term used is **exchanging** for this procedure.

Maths Vocabulary:

'**ones**' were known as units prior to the National Curriculum update in 2014.

A **calculation** is a way to determine an amount. Here, it involves addition and subtraction.

Base 10 equipment refers to a physical resource which represents numbers. The small cubes represent 'ones'; the rods represent 'tens' and are made up of 10 small cubes; the squares represent 'hundreds' and are made up of 10 rods; the large cubes represent 'thousands' and are made up of 10 squares.

Rounding is when a whole number or decimal number is changed so that it is simpler but still has a value close to what it was. Rounded numbers are easier to use, but not as accurate.

A **part-whole model** is a concept to show how numbers can be split into different parts. They can be used to represent numbers, as well as a wide variety of calculations. The concept follows the structure $\text{part} + \text{part} = \text{whole}$, but this may change depending on how many parts there are.

A **negative number** is a number less than zero. It can be represented on either a horizontal or vertical number line. A negative number is written with a minus sign in front of it. Example, -4

Guide to grammar vocabulary

Adult Guide to Conjunctions

In Years 3 and 4, children are taught to use a range of conjunctions to extend sentences. They should be able to use **CO-ORDINATING** and **SUBORDINATING** conjunctions fluently in independent writing to help engage the reader. This activity pack is a great way to help to consolidate and reinforce the use of conjunctions.

Conjunctions: Conjunctions are the 'glue' that hold together words and different parts of a sentence. For example, in the sentence, '*Sandra bought a new bag and she bought some new shoes*', the conjunction **and** joins together the two clauses (Sandra bought a new bag. She bought some new shoes.).

Co-ordinating conjunctions: Children will first begin to use co-ordinating conjunctions in Years 1 and 2. They are usually used to join two independent clauses together (small sentences which make sense on their own). The conjunctions taught are **and**, **so**, **but** and **or**. For example:

*June likes coffee **but** she does not like tea.*

In the sentence above, '*June likes coffee*' makes sense on its own. Equally, so does '*she does not like tea*'. However, when we join these two together using **but**, they make one compound sentence.

Subordinating conjunctions: In Years 3 and 4, children are taught to use a range of subordinating conjunctions to extend their sentences such as **when**, **because**, **if**, **unless**, **although** and **while**. These are the first words within a subordinate clause (a sentence which doesn't make sense on its own), which join it to the main clause (the sentence which can make sense on its own). For example:

*Peter ate his dinner quickly **because** he was hungry.*

'*Peter ate his dinner quickly*' is the main clause because it makes sense on its own. However, '*because he was hungry*' is not a sentence which makes sense on its own. This clause only makes sense once it is joined to the independent clause, '*Peter ate his dinner quickly*.'

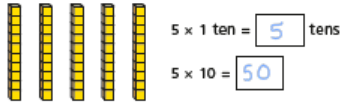
Y4 - Autumn - Block 1 - Step 7 - The number line to 10,000 Answers

Question	Answer
1	
2	
3	
4	<p>a) 1,600 b) 7,130</p>
5	2,600 2,800
6	
7	<p>a) A = 2,000 B = 7,500 C = 9,990 b) Any three numbers between 2,000 and 7,500</p>
8	<p>If it went up in 1,000s there would be 10 intervals between 0 and 10,000 There are 20 intervals on the number line so it goes up in 500s.</p>
9	<p>a) Various possible answers as long as they are an equal distance from 2,400 e.g. 2,300 and 2,500, 2,390 and 2,410, 1,400 and 3,400 b) Various possible answers as long as 2,400 is approximately $\frac{3}{4}$ of the way between e.g. 2,100 and 2,500, 2,370 and 2,410</p>

Multiply by 10



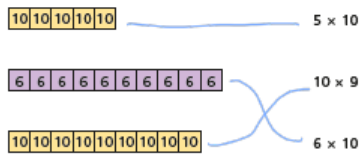
1 Complete the calculation shown in base 10



2 Complete the number sentences.

- a) $2 \times 10 = 20$
- b) $4 \times 10 = 40$
- c) $10 \times 8 = 80$
- d) $7 \times 10 = 70$
- e) $10 \times 6 = 60$
- f) $30 = 3 \times 10$

3 Match the bar models to the multiplications.



6 Use counters on a place value chart to work out 23×10
 $23 \times 10 = 230$

7 Which of these is the odd one out? Tick your answer.

- There are 10 teams with 7 players on each team.
- There are 10 red flowers and 7 yellow flowers.
- There are 7 ten frames with 10 counters in each.

Talk about it with a partner.

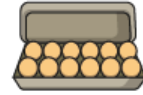
8 Complete the calculations.

- a) $45 \times 10 = 450$
- b) $36 \times 10 = 360$
- c) $780 = 10 \times 78$
- d) $31 \times 10 = 310$
- e) $10 \times 14 = 140$
- f) $400 = 40 \times 10$
- g) $32 \times 10 = 10 \times 32$
- h) $670 = 2 \times 5 \times 67$

9 Eva walks 60 m to school.
 Teddy walks 10 times as far as Eva to school.
 How far does Teddy walk to school?

Teddy walks 600 m to school.

4 Tom has 10 boxes of eggs.
 There are 12 eggs in each box.
 How many eggs does he have altogether?



Tom has 120 eggs.

5 Complete the sentences.

H	T	O
	10	111
	10	111
	10	111
	10	111
	10	111
	10	111
	10	111
	10	111
	10	111
	10	111

Each row has 1 ten and 3 ones.

There are 10 rows.

The calculation is $13 \times 10 = 130$

10 Amir thinks of a 2-digit number.
 He multiplies it by 10

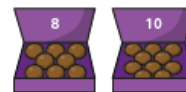


My answer is between 755 and 795

Write all the numbers Amir could be thinking of.

76, 77, 78

11 Chocolates come in boxes of 8 and 10



Rosie needs to buy 80 chocolates.

a) What boxes could Rosie buy?

10 boxes of 8
 8 boxes of 10
 5 boxes of 8 and 4 boxes of 10

b) What is the fewest number of boxes Rosie needs to buy?

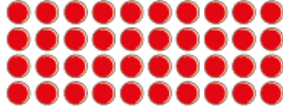
8

Division

Divide by 10



1 Complete the calculation shown by the array.



$40 \div 10 = \boxed{4}$

2 Complete the calculations.

a) $30 \div 10 = \boxed{3}$

d) $80 \div 10 = \boxed{8}$

b) $60 \div 10 = \boxed{6}$

e) $100 \div 10 = \boxed{10}$

c) $90 \div 10 = \boxed{9}$

f) $\boxed{12} = 120 \div 10$

3 Balloons come in bags of 10

Huan has 130 balloons.
How many bags does he have?



Huan has $\boxed{13}$ bags of 10 balloons.

5 Mr Smith has this amount of money.



He buys some rulers costing 10p each.



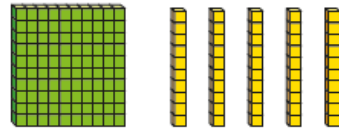
Mr Smith spends all of his money.
How many rulers does he buy?

$\boxed{25}$

6 Alisha has a bag of 10p coins.
She has £3 and 40p altogether.
How many 10p coins does Alisha have?

Alisha has $\boxed{36}$ 10p coins.

4 a) Whitney makes 150 using base 10



I am going to exchange my hundred for tens

Complete the sentences.

$150 = 1 \text{ hundred} + \boxed{5} \text{ tens}$

$1 \text{ hundred} = \boxed{10} \text{ tens}$

Whitney has $\boxed{15}$ tens altogether.

$150 \div 10 = \boxed{15}$

b) Make 230 using base 10

Complete the sentences.

$230 = \boxed{2} \text{ hundreds} + \boxed{3} \text{ tens}$

$\boxed{2} \text{ hundreds} = \boxed{20} \text{ tens}$

There are $\boxed{23}$ tens altogether.

$230 \div 10 = \boxed{23}$

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7 Fill in the missing numbers.

a) $360 \div 10 = \boxed{36}$

d) $\boxed{410} \div 10 = 41$

b) $630 \div 10 = \boxed{63}$

e) $\boxed{75} = 75 \text{ tens} \div 10$

c) $10 \times \boxed{52} = 520$

f) $86 = \boxed{86} \text{ tens} \div 10$

8 A pool is 10 m long.

Annie and Mo are swimming lengths of the pool.
Annie swims 85 lengths.
Annie and Mo swim 1,240 m in total.
How many lengths does Mo swim?

$\boxed{39}$

9 Complete the calculations.

a) $360 \div 10 \div 3 = \boxed{12}$

c) $720 \div 10 \div \boxed{9} = 8$

b) $450 \div 10 \div 5 = \boxed{9}$

d) $\boxed{40} \div 10 \div 4 = 1$

Perimeter of a rectangle



1 Work out the perimeter of each rectangle.

a)

$5 \text{ cm} + 7 \text{ cm} + 5 \text{ cm} + 7 \text{ cm} = 24 \text{ cm}$

b)

$2 \text{ cm} + 8 \text{ cm} + 2 \text{ cm} + 8 \text{ cm} = 20 \text{ cm}$

3 Tommy is working out the perimeter of some rectangles.

$8 \text{ cm} + 5 \text{ cm} = 13 \text{ cm}$
 $13 \text{ cm} \times 2 = 26 \text{ cm}$

Use Tommy's method to find the perimeter of these rectangles.

a)

$5 \text{ cm} + 4 \text{ cm} = 9 \text{ cm}$
 $9 \text{ cm} \times 2 = 18 \text{ cm}$

b)

$10 \text{ cm} + 5 \text{ cm} = 15 \text{ cm}$
 $15 \text{ cm} \times 2 = 30 \text{ cm}$

c)

$1 \text{ cm} + 9 \text{ cm} + 1 \text{ cm} + 9 \text{ cm} = 20 \text{ cm}$

2 Work out the perimeter of the rectangles.

a)

22 cm

b)

30 cm

c)

26 cm

d)

5 km

4 Each lolly stick is 8 cm long.

Find the perimeter of the shape.

64 cm

5 Each of these rectangles has a perimeter of 24 cm.

Work out the missing lengths and label the diagrams.

a)

2 cm

b)

3 cm

c)





7 cm

What do you notice?




Find any other rectangles that have the same perimeter.

English – GPS activity mats

1.

<p>a</p> <p>Possible answer: It should say feathers with no apostrophe as it is a plural and the apostrophe should be in peacock's and 'strutting' is in the wrong tense – it should 'strutted' or 'As it was proudly strutting...'</p> 	<p>c</p> <p>Accept any suitable fronted adverbial phrase marked with a comma, e.g. During the ferocious storm, the weathervane spun wildly.</p> 	<p>e</p> <p>Add suitable noun phrases in the gaps:</p> <p>Accept any sensible noun phrase, e.g. 'the rushing girl'.</p> <p>Accept any sensible noun phrase, e.g. 'the mammals'.</p>
<p>b</p> <p>Can you think of words ending in the suffix -ation that match these definitions?</p> <p>Getting things ready and organised. _____ preparation _____</p> <p>Carefully watching something (e.g. in a science experiment). _____ observation _____</p> <p>Cars, trains, planes, buses, etc. _____ transportation _____</p>	<p>d</p> <p>Mr Whoops has accidentally jumbled up a pair of homophone words. Can you help him to unjumble them?</p> <p>ceepi aecpe</p> <p>_____ piece _____</p> <p>_____ peace _____</p>  <p>Example answers: The lady couldn't resist a second piece of cake. The Prime Minister hoped that one day there would be world peace.</p>	<p>f</p> <p>Add suitable determiners back into these sentences:</p> <p>___ A ___ healthy salad makes a delicious and nutritious lunch.</p> <p>Why not add ___ an ___ egg for extra protein?</p> <p>For a healthy dessert, try adding ___ a ___ pot of natural yoghurt to ___ some ___ fresh fruit.</p> 


2.

<p>a</p> <p>Underline the verbs in these sentences.</p> <p>During the downhill final, the Norwegian skier <u>had</u> a successful run. She <u>swooped</u> around the flags and only <u>knocked</u> one of them over.</p> <p>As she <u>crossed</u> the finish line, she <u>held</u> her arms aloft.</p> 	<p>b</p> <p>Can you think of the sub- prefix words to match these definitions?</p> <p>an underwater vessel sub<u>marine</u> _____</p> <p>an organisational feature used in information texts sub<u>heading</u> _____</p>	<p>e</p> <p>Join the prefixes to the correct root words:</p> <table border="1"> <tr> <td>inter-</td> <td>market</td> </tr> <tr> <td>super-</td> <td>pilot</td> </tr> <tr> <td>auto-</td> <td>national</td> </tr> </table> <p>Accept 'international', 'supermarket' or 'autopilot' in a direct speech sentence, e.g. "I'm off to the supermarket!" shouted Mum.</p>	inter-	market	super-	pilot	auto-	national
inter-	market							
super-	pilot							
auto-	national							
<p>c</p> <p>Can you underline all of the determiners in these sentences?</p> <p><u>The</u> dimorphodon was <u>a</u> flying dinosaur that lived in prehistoric times.</p> 	<p>d</p> <p>Write a present progressive sentence about this picture that also has a fronted adverbial. Don't forget your comma.</p> <p>Accept any sentence with 'is', an -ing verb form and a correctly punctuated fronted adverbial, e.g. In the lesson, the boy is working on a maths problem.</p>	<p>f</p> <p>Mr Whoops has been juggling with the letters from one of his Y4 spelling words. Can you spot what it is?</p> <p>t a r h g s t</p> <p>_____ straight _____</p> 						

3.

a

Add a sensible subordinate clause to this sentence. Circle the subordinating conjunction that you have used:



Accept any sensible sentence with a subordinate clause with an appropriate circled subordinating conjunction, e.g. The children organised themselves into teams because they had an important task to complete.

b

Place the plural possessive apostrophe correctly in this sentence:

The children's lunchboxes and drinks were left on the coach.

c

Put ticks in the correct boxes:

	expanded noun phrase	main clause	subordinate clause
before the sun came up			✓
a crunchy, red apple	✓		
since he was only 4 years old			✓

d

Circle all of the determiners in this sentence:


During the zoo visit, they saw many monkeys and an antelope.

e

Mr Whoops has made **two** clumsy spelling mistakes in his sentences. Can you underline them and correct them?

Mr Green, my next door naybour, is a very kind man. He lives at number eyght.

neighbour



eight

f


Can you add suitable prepositions to this sentence?

Any suitable prepositions, e.g. after, out and into

4.

a

Place a comma after the fronted adverbial in the sentence and then underline the subordinate clause.



With his arms outstretched, the evil pea shouted at the shocked crowd before he flew off into the night.

b

Think of **two** different adverbs that could describe this verb:

Accept any adverbs, e.g. anxiously, happily, fearfully.

Add a conjunction to one of the sentences and add more detail.

Accept any sentence with an added conjunction and additional information, e.g. "What was that noise?" asked the boy fearfully but he dare not move.

c

Clumsy Mr Whoops has lost all the words from this word family. Can you help him to find four of them?

Accept any three correctly spelt words with the root word 'cent' (meaning hundred), e.g. percent, percentage, century, centimetre, centilitre.

d

Can you fill the spaces using the correct word? (there/their/they're)

- They put on their coats.
- There was a squirrel in the garden.
- "They're playing well today!" said the coach.

Accept any answer that mentions the apostrophe being used for contraction/omission.

e

Tick all the sentences that contain a conjunction.


After he had breakfast, Clinton set off for school.

He ate a chocolate mousse after his sandwich.

During playtime, he ate an apple from his lunchbox.

f

Explain the **two** things that are wrong with these sentences and correct them.




The yoga instructor are demonstrating the pose to the class. Yoga can have a great affect on a person's flexibility.

An explanation that the subject and verb don't agree - are/is and that the wrong homophone has been used - should be 'effect'.

5.


a



Add the missing verbs to these sentences so that they are grammatically correct.

Heading for the supermarket, the Fairtrade bananas are/were packed onto the haulage lorry. The lorry driver was ready to set off.

b



Accept any plural possessive apostrophe sentence, e.g. **The soldiers' feet all marched in time.**

c

Join the prefixes to the correct root words:

re-	practical
im-	obey
dis-	arrange

Accept 'rearrange', 'disobey' or 'impractical' in a direct speech sentence, e.g. "We will have to rearrange the staff meeting," said the head teacher.


e

Sort these words into the table:

determiners	prepositions
nine	during
many	opposite

Accept any determiners and prepositions added to the correct column.

d




Mr Whoops has got in a terrible muddle with his 'ch' words that sound like a 'k'. Can you help him to match each definition with the correct word?

chorus	the repeating part of a song
echo	you might hear one of these inside a cave
character	a person in a book or film

f

Rewrite this sentence with the subordinate clause at the beginning. Don't forget the comma!


The crisps were strewn all over the carpet as the toddler had dropped them.



As the toddler had dropped them, the crisps were strewn all over the carpet.

6.

a



Let me try!

Can you write Lily's words as an accurately-punctuated direct speech?

"Let me try," said Lily as she clicked the mouse.

b

Can you think of a word that ends in -ture to match these definitions?

items in your home - furniture

a fun journey - adventure


c

Mr Whoops has accidentally jumbled up **two** -ous suffix words. What are they?

u d o g e r s n a
m n d t e e r o s u


dangerous

tremendous



e

Up-level this sentence by adding an expanded noun phrase and an extra subordinate clause.



Accept an up-levelled sentence with an added expanded noun phrase and a subordinate clause, e.g. **The fresh, delicious fish was on sale at the shop after being caught that very morning.**

d

Rewrite these sentences in present perfect tense:

I went to the supermarket.
I have been to the supermarket.

Lewis drew a picture.
Lewis has drawn a picture.

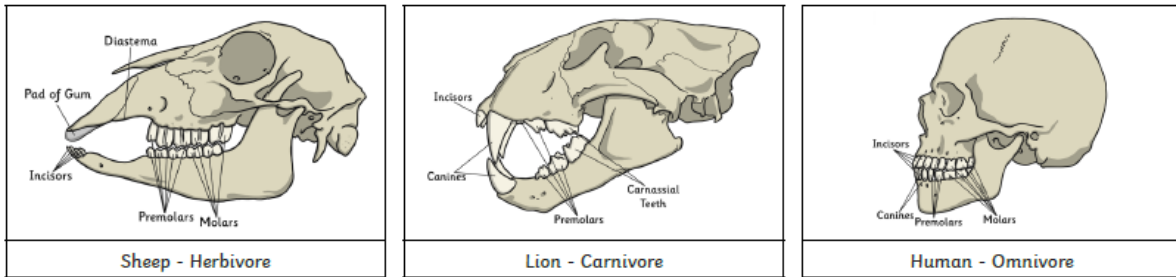
f

Insert the correct speech punctuation into these sentences.

Daniel called, "Are you ready?"

The captain commanded, "Drop to the floor!"

Science

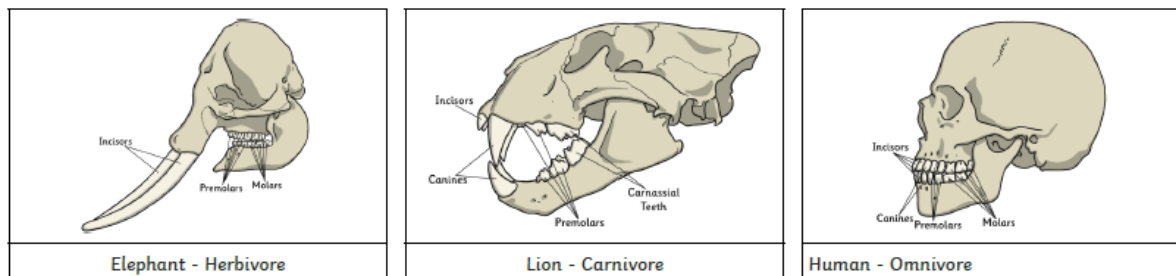


Do all three have any teeth that are the same? Which type of teeth?

They all have premolars.

Why do you think they have the type of teeth that you stated above in common?

I think they all have premolars because they all need to hold and crush their food.

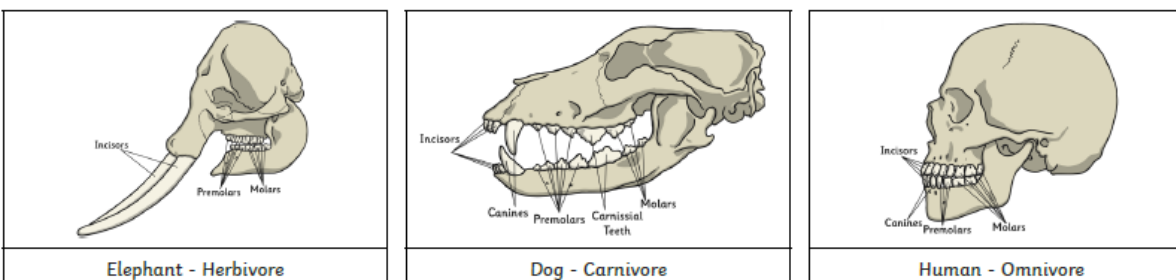


What are the differences in the type of teeth these animals have?

The elephant has lots of flat molar and premolars for eating its plant diet. The lion has sharp teeth to tear the meat off its prey. Humans have a mixture of sharp and flat teeth as we are omnivores.

What would happen if the lion had teeth like an elephant?

If the lion had teeth like an elephant, it would not be able to rip and chew the meat off its prey.



Are there any types of teeth that all three have in common? Why do they have these in common?

They all have premolars and molars because all 3 animals need to hold and crush their food before swallowing it.

Explain any differences that you have found between the types of teeth the animals have:

The elephant has lots of flat molar and premolars for crushing its plant diet, as well as large incisors that are outside the mouth. The lion has lots of sharp teeth to tear the meat off its prey. The human has a mixture of sharp and flat teeth as we are omnivores.

The Queen's Birthdays

1. On what date was Queen Elizabeth born?
Queen Elizabeth was born on 21st April, 1926.
2. Which month is The Queen's actual birthday and which month is The Queen's official birthday?
The Queen's actual birthday is in April and the official birthday is in June.
3. Which queen did Queen Elizabeth II pass as longest reigning British monarch in September 2015? What relation was that queen to Queen Elizabeth II?
Queen Elizabeth II passed Queen Victoria as longest reigning British monarch. Queen Victoria was Queen Elizabeth's great-great grandmother.
4. Why does The Queen celebrate two birthdays?
The Queen celebrates two birthdays after George II thought it would be too cold in November to parade on his birthday, so he celebrated it as part of the spring Trooping the Colour parade. The tradition has continued ever since.
5. Why do you think The Queen's birthday celebrations were changed from a Thursday to a Saturday?
I think The Queen's birthday celebrations were changed from a Thursday to a Saturday so that more people could take part in the celebrations, as Thursday is a working day.
6. What are the three main locations for the Trooping the Colour parade? List them here.
The three main locations for the Trooping the Colour parade are Buckingham Palace, the Mall and Horse Guards Parade.
7. Do you think there would be any disadvantages to having two birthdays? Give reasons for your answers.
I think it may be expensive to celebrate two birthdays if you have to hold two parties – especially if you have party bags for everyone!
8. Why do you think The Queen continued with the parade after she was shot at in 1981?
I think The Queen continued with the parade because even though she must have been frightened by the gunshots, she wasn't hurt and if she had stopped the parade, then a lot of people who had come out to see it would have been disappointed.
9. What are the titles called that separate each part of the fact file?
The titles that separate each part of the fact file are called sub-headings.
10. If you had to organise The Queen's birthday celebrations, plan three activities that she may enjoy. Give reasons for your choices.
Various responses which could include appropriate activities for a senior citizen, like a picnic, a riverboat trip, a visit to the seaside, a day in the countryside, etc.

Victorian Inventors

1. How old was Alexander Graham Bell when he created his first invention? Tick one.

- 12
 15
 20
 32

2. Number the events below to show the order they happened in Josephine Cochrane's life. The first one has been done for you.

3	She worked in her tool shed to invent the dishwasher.
1	She was born in Ohio, USA.
5	She opened her own factory.
2	Josephine's expensive dishes became chipped.
4	Josephine won a prize for her invention.

3. Join the boxes to match the name of the person to their role.

Eliza Grace Symonds	Alexander Graham Bell's assistant
Thomas Watson	Josephine Cochrane's mother
Irene Fitch Garis	Alexander Graham Bell's mother

4. Find and copy a word from Josephine Cochrane's fact file which means the same as expensive.

valuable

5. Alexander Graham Bell was an engineer. Explain what is meant by the word engineer.

An engineer is a person who designs or builds engines or machines.

6. Who was George Butters?

George Butters is a mechanic who helped Josephine Cochrane to invent the dishwasher.

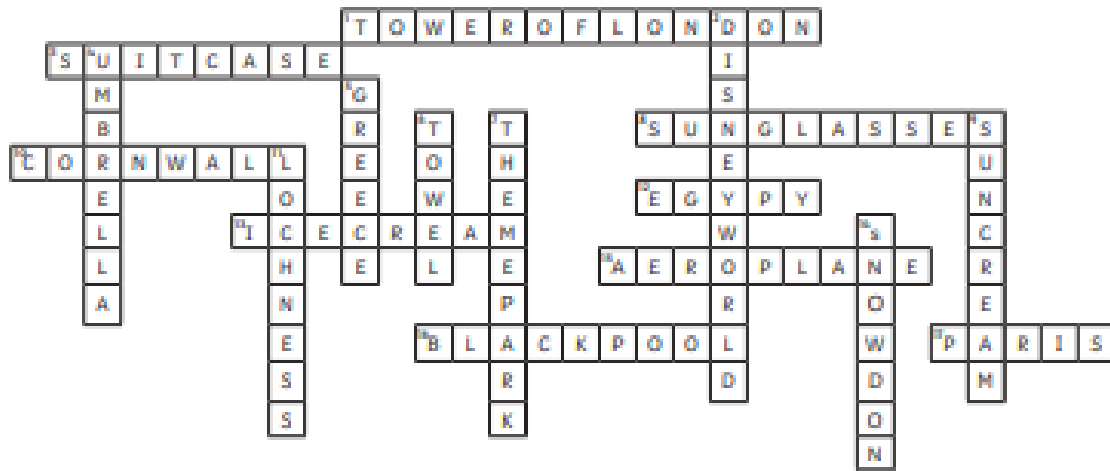
7. Comment on the importance of Alexander Graham Bell's invention.

Pupils' own responses, such as: Alexander Graham Bell's invention was important because it allowed people from around the world to communicate with each other in a way that they never had been able to before.

8. Explain how Josephine Cochrane's invention still impacts life today.

Pupils' own responses, such as: Josephine Cochrane's invention still impacts life today because millions of homes, restaurants and hotels wash their expensive dishes safely and easily using a dishwasher.

Summer Holiday



Across

- 1. Tower of London
- 3. Suitcase
- 8. Sunglasses
- 10. Cornwall
- 12. Egypt
- 13. Ice cream
- 15. Aeroplane
- 16. Blackpool
- 17. Paris

Down

- 2. Disney
- 4. Umbrella
- 5. Greece
- 6. Towel
- 7. Theme park
- 9. Sun cream
- 11. Loch Ness
- 14. Snowdon

Multiplication and Division Facts

Summer Mosaic **Answers**

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

yellow = 1 - 6 | blue = 7 - 18 | red = 19 - 39 | green = 40 - 65 | black = 66 - 96

$72 \div 8$	$33 \div 3$	$27 \div 3$	$80 \div 8$	4×3	$36 \div 3$	$80 \div 8$	$21 \div 3$	$36 \div 4$	$24 \div 3$	1×8
$30 \div 3$	$36 \div 3$	10×8	12×8	$24 \div 3$	$21 \div 3$	8×8	11×4	12×4	6×8	10×4
$44 \div 4$	9×8	1×8	$36 \div 4$	10×8	$33 \div 3$	6×8	$32 \div 4$	3×4	$72 \div 8$	10×4
11×8	$27 \div 3$	$72 \div 8$	$24 \div 3$	$21 \div 3$	11×8	11×4	5×8	6×8	8×8	7×8
12×8	3×3	$21 \div 3$	$36 \div 3$	4×3	9×8	$36 \div 4$	$64 \div 8$	12×4	$30 \div 3$	$56 \div 8$
7×4	4×8	8×3	4×4	3×8	9×3	$33 \div 3$	$28 \div 4$	5×8	$72 \div 8$	$44 \div 4$
2×8	7×3	11×3	9×3	12×3	$36 \div 4$	$27 \div 3$	8×1	11×4	$21 \div 3$	1×8
$12 \div 3$	12×3	8×4	11×3	6×4	$40 \div 8$	12×4	8×8	5×8	7×8	11×4
$4 \div 4$	4×8	8×3	3×8	3×8	$24 \div 8$	5×8	10×4	6×8	12×4	5×8
1×4	7×3	9×4	12×3	10×3	$8 \div 8$	$12 \div 4$	11×4	7×8	8×8	$48 \div 8$
2×3	$48 \div 8$	$20 \div 4$	$3 \div 3$	$16 \div 8$	$16 \div 4$	$15 \div 3$	$20 \div 4$	$32 \div 8$	1×4	$20 \div 4$

Summertime Addition and Subtraction Maths Mosaic **Answers**

Solve the calculations to reveal the hidden picture. Each answer has a special colour.

green = 7200 | pink = 7500 | black = 7800 | blue = 8100 | yellow = 8400

$2650 + 5450$	$9972 - 1872$	$1788 + 6612$	$5509 + 2811$	$8369 + 31$	$9959 - 1559$	$1528 + 6872$	$757 + 7343$	$7619 + 481$
$2107 + 5993$	$6475 + 1925$	$4660 + 3740$	$2461 + 5939$	$8417 - 17$	$958 + 7442$	$6194 + 2206$	$9859 - 1459$	$9526 - 1426$
$5959 + 1841$	$8263 - 463$	$1171 + 6629$	$715 + 7085$	$4865 + 2935$	$3101 + 4699$	$5518 + 2282$	$1036 + 6764$	$4399 + 3401$
$9584 - 1184$	$7554 + 246$	$6999 + 801$	$677 + 7123$	$5590 + 2810$	$8688 - 888$	$9892 - 2092$	$333 + 7467$	$9860 - 1460$
$4334 + 4066$	$1577 + 6823$	$1920 + 5880$	$1787 + 6613$	$5588 + 2812$	$8370 + 30$	$8360 - 560$	$4335 + 4065$	$1576 + 6824$
$9270 - 870$	$7308 + 1092$	$3886 + 4514$	$8703 - 303$	$6238 + 2162$	$7083 + 1317$	$3591 + 4809$	$1162 + 7238$	$4200 + 4200$
$7787 + 613$	$7787 + 613$	$3886 + 4514$	$8703 - 303$	$7308 + 1092$	$7787 + 613$	$3073 + 5327$	$7456 + 944$	$6726 + 1674$
$3979 + 4421$	$8434 - 34$	$5927 + 1573$	$5124 + 2376$	$6329 + 1171$	$8233 - 733$	$8899 - 1399$	$3980 + 4420$	$9335 - 935$
$6967 + 233$	$3887 + 4513$	$8704 - 304$	$1042 + 6458$	$1964 + 5536$	$8825 - 1325$	$5589 + 2811$	$8360 + 40$	$2546 + 4654$
$1827 + 5373$	$658 + 6542$	$6475 + 1925$	$4660 + 3740$	$2461 + 5939$	$8417 - 17$	$958 + 7442$	$3043 + 4157$	$4380 + 2820$