Letter from the 3 Bears

To the parents or guardians of Goldilocks,

We are writing because we think you should know about the naughty behaviour of your daughter, Goldilocks.

We live in the yellow cottage in the middle of the wood and today, we returned from our walk to find our house had been broken into.

As well as helping herself to our porridge, which had been left to cool down, Goldilocks had also broken one of our chairs! Baby Bear was most upset, because it was his own special chair and it now needs mending.

We are sure it was your daughter because we found her asleep in a bed upstairs. She woke up as we came into the room and rather than saying sorry, she just ran away without a word. Very rude!

We are sure you will agree that Goldilocks should be punished in some way. We would suggest that she is not allowed to play out for at least a week. She should certainly stay away from our cottage, unless she would like to apologise.

Yours faithfully,

The 3 Bears

- 1. Who is this letter from?
- 2. Why are they writing it?
- 3. What do you think they were most upset about?
- 4. How do they think Goldilocks should be punished?
- 5. Do you think Goldilocks should apologise?
- 6. Pretend you are Goldilocks. Write a note or card to say sorry to the bears.



1	
3	
5	
6. Note to the Bears	

Numbers

Try some number activities like these every day to help develop your number skills!

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Counting Activity Ideas

- Start from 0 and count in 1's, 2's, 5's or 10's.
- Pick a number to start from and count in 1's, 2's, 5's and 10's.
- Make it fun and count in funny voices can you count like a robot or with a very high voice?
- Cover up several numbers. Can you count up to find the hidden numbers?





Oh dear! Bee-Bot has jumbled up these numbers.

Can you help to put them in order?

1.



6

39

21

67



2.

37



44

18















3.

4

23

99

51













You could try making some more of your own

Fill in the missing numbers.

Now try making some of your own:



Number Bonds

 $\begin{tabular}{ll} \textbf{Number Bonds} are pairs of numbers that make up a given number. \\ \end{tabular}$



Can you write down all the Number Bonds to 10?

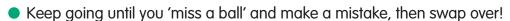
Now a bit trickier...

Can you write down all the Number Bonds to 20?

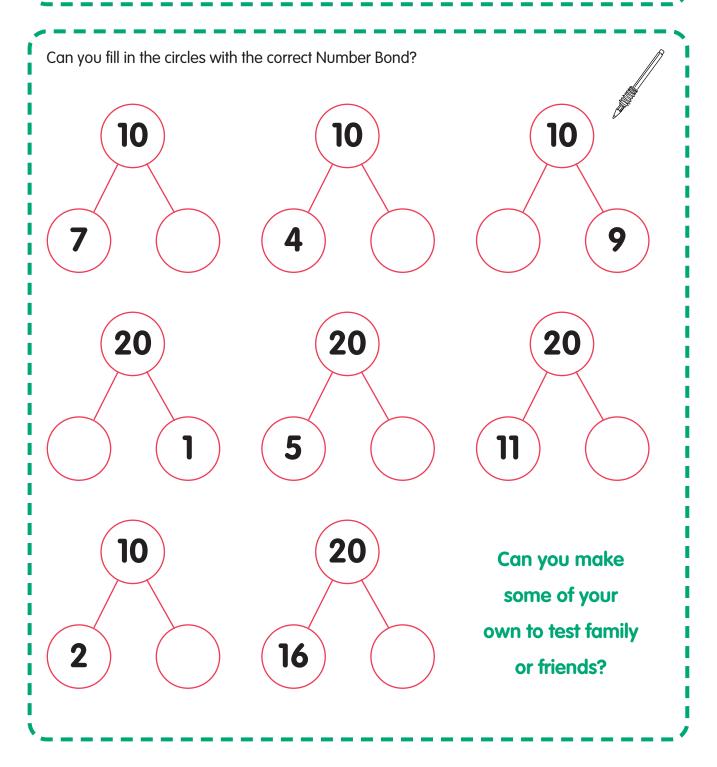
Tip: try counting out 20 objects and use them to help you.

Play 'Number Bond Ping Pong'

- Player A says a number to 10/20 (say it while pretending to swing your racket).
- Player B 'hits' back the number bond to 10/20 E.g. Player A - 4'' Player B - 6''



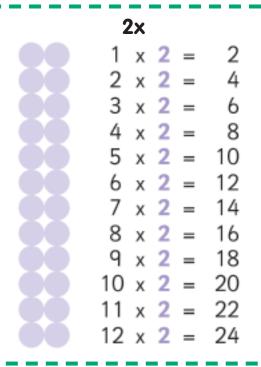




Let's Multiply!

It can help us in lots of areas of maths if we can quickly recall our multiplication facts.

Let's get practising our 2x, 5x and 10x table!



10x $1 \times 10 =$ 10 20 $2 \times 10 =$ 30 $3 \times 10 =$ $4 \times 10 =$ 40 50 $5 \times 10 =$ $6 \times 10 =$ 60 $7 \times 10 =$ 70 80 $8 \times 10 =$ 90 $9 \times 10 =$ $10 \times 10 = 100$ $11 \times 10 = 110$ $12 \times 10 = 120$

Learning Tips

- March like a soldier and chant the multiplication tables e.g. 1x5 = 5, 2x5 = 10...
- Play multiplication ping pong with one person batting the question and the other batting back the answer.



Quick Questions



Now try making your own 'quick 10' and test yourself or someone else!



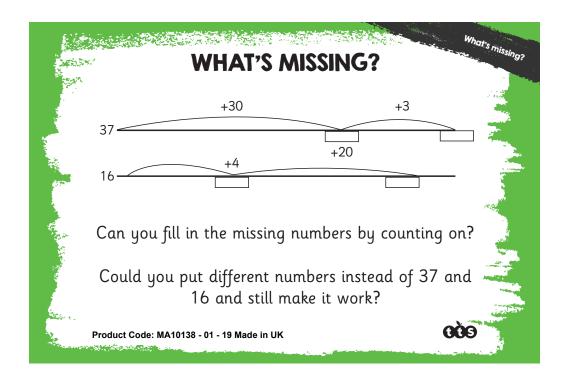
Try practising your times tables every day!

What's Missing?

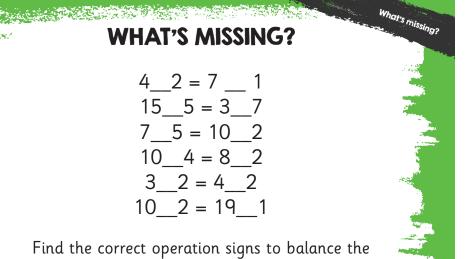
Blue-Bot has been cheeky and stolen lots of numbers and operations. Become a maths detective and see if you can solve these problems and fill in the missing gaps.



What's missing? **WHAT'S MISSING?** a) 11, 13, ___, ___, 19, 21, ___ b) 83, 73, ___, ___, 43, 33, ___ Explain what is happening and find the missing numbers Can you see any patterns? Product Code: MA10138 - 01 - 19 Made in UK







What's missing? **WHAT'S MISSING?** a) 28, 33, 38, __, __ 53, __ b) 1, 4, 7, ___, __, 16, ___ Explain what is happening and find the missing

numbers

equations

Product Code: MA10139 - 12 - 18 Made in UK

Product Code: MA10138 - 01 - 19 Made in UK

GÖS

GÖS

Dip & Pick

Sam has 4 marshmallows on his ice-cream. Jake has double the amount on this. How many marshmallows does Jake have on his ice-cream?

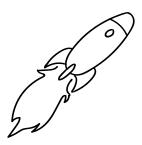
On Brad's ice-cream there are 14 marshmallows. He has double the amount that Jill has. How many marshmallows does Jill have on her ice-cream?



Sam has

6 marshmallows on his ice-cream. Jake has double the amount on his. How many marshmallows does Jake have on his ice-cream? Jake's dad gives him 8 more marshmallows. How many does Jake have now?

Sam has 4 marshmallows on his ice-cream. Jake has double the amount on his. Jake's dad gives him 8 more marshmallows. How many does Jake have?



There are 20 marshmallows in a shop. John buys 6 marshmallows. Olivia wants to buy double the amount that John has. Are there enough marshmallows? Explain how you know.





Number and Place Value

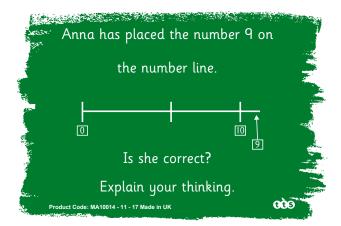
Bee-Bot has been struggling with his maths.

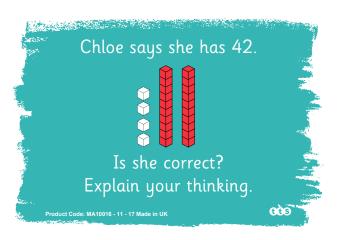
Put your maths hats on and see if you can help him to solve these questions.



I am an odd number less than 6. What numbers could I be? luct Code: MA10014 - 11 - 17 Made in UK

Chose two digit cards from below to make the number sentence correct. One less than ? | is Find three ways to do it. Code: MA10014 - 11 - 17 Made in UK

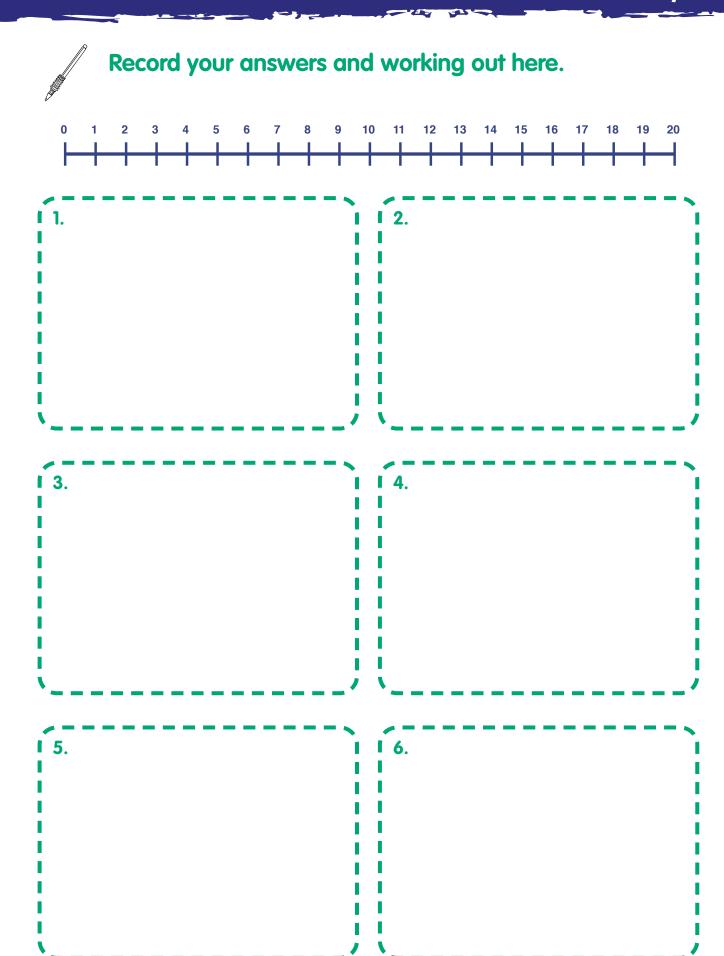




Ben says the place value grid shows the number 6. Is he correct? Explain your thinking.

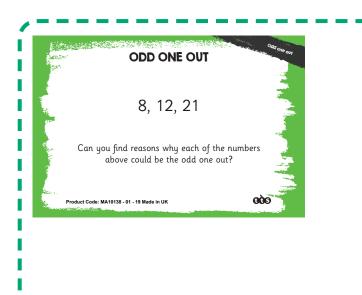
Use the digit cards 2, 6, 3 and 5. Write all the two-digit numbers you can make, that are less than 50. How do you know you have them all? Convince me.

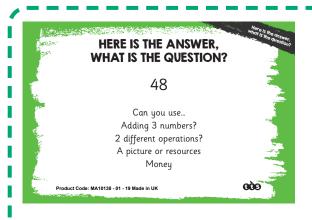




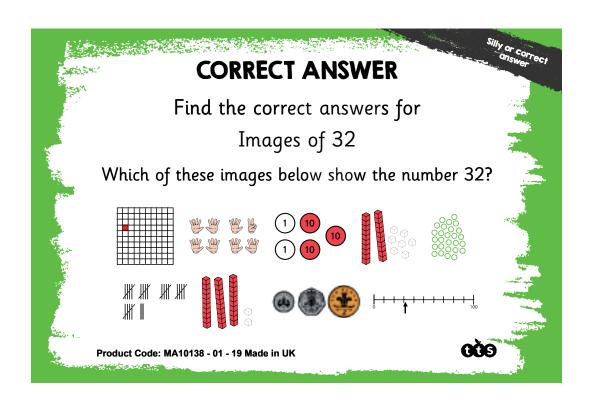
Reasoning

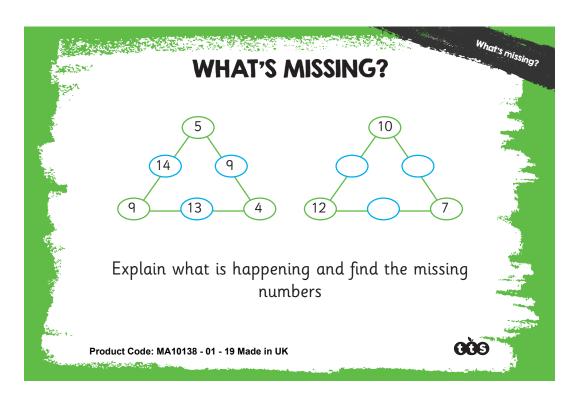
Test your knowledge and combine your mathematical skills to help solve these reasoning problems.







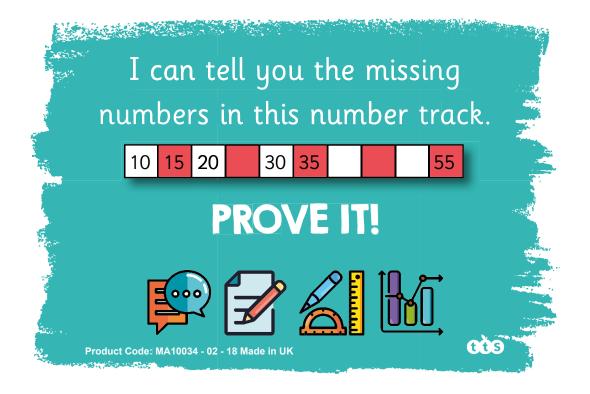


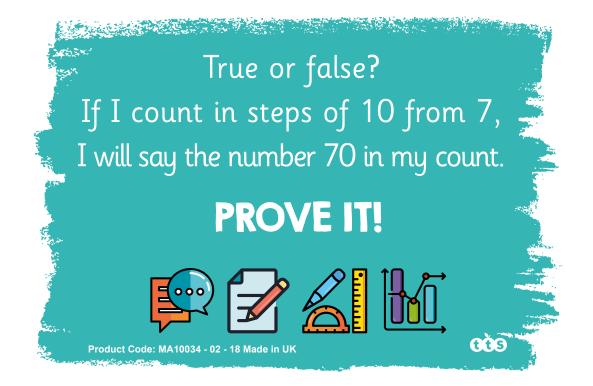


You are a Maths Superstar!

Time to show off and 'prove' what you know and can do!





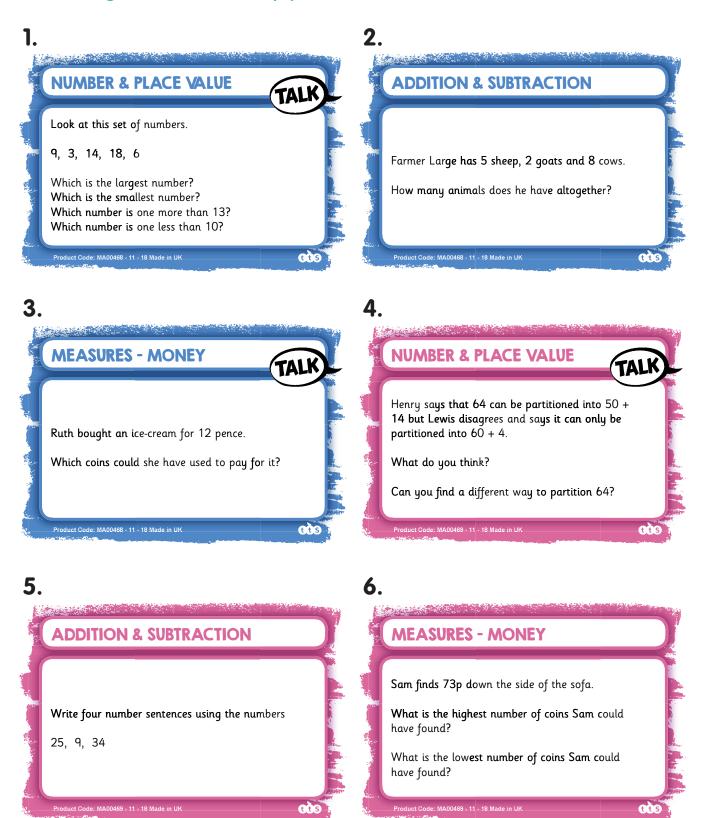






Problem Solving

Have a go at these tricky problems!





Record	your answers and	d working out here.	
1.		2.	
'	'	,	'
3.		4.	
<i></i>			
5.11111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111<		6.	

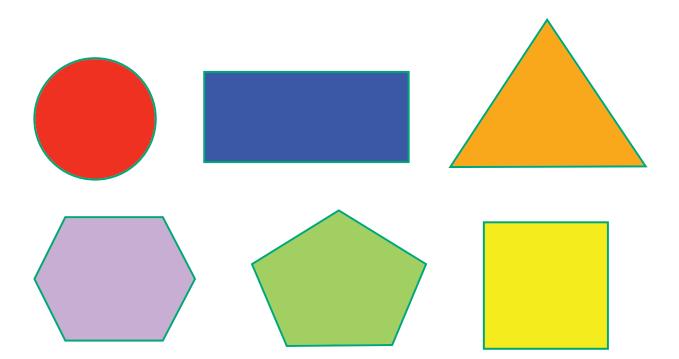


Shape Hunt!



Take a look at the 2D shapes below and discuss:

- What are the names of these shapes?
- Can you name the properties of each shape? (sides, vertices)





What can you find?

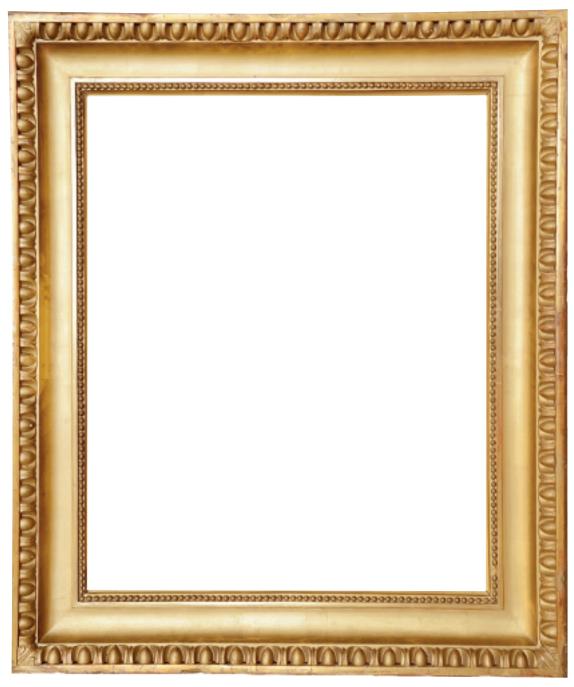
- Go on a shape hunt around your home.
- Draw or stick pictures of the shapes that you find.

Here is one to get you started.





Draw your own picture using 2D shapes



What shapes have you used in your picture?



Kitchen Science: Raisin Bubble Boogie

This science activity will require a few items from your kitchen and an adult to help. Many thanks to **Sue Martin** for this amazing kitchen science lesson!

This experiment is really easy to set up and will help children develop their understanding of floating and sinking, liquids and gases.

What you do

This one couldn't be simpler: pour out a glass of fizzy drink and drop in the raisins.

Now watch the raisins dance!

What you need

- A bottle or glass of clear fizzy drink (e.g. lemonade, tonic or soda water – freshly opened)
- A handful of raisins (4 or 5 will suffice)

What's happening?

The raisins are initially too heavy to float, so they sink into the drink. The drink itself contains carbon dioxide (CO2) gas, which has been forced into the drink at high pressure. When a bottle is opened, some of this gas escapes immediately (you hear the whoosh as it rushes to escape) but the rest remains in the liquid for quite a while. You may notice that bubbles form on the sides of the container first.

Tiny imperfections in the glass/plastic make ideal sites (known as 'nucleation sites') for bubbles of gas to form. Dropping anything else into the drink will provide more of these sites, so more bubbles are produced. Raisins have a pitted surface, which makes them ideal for the formation of gas bubbles. When the raisins reach the bottom, bubbles of CO2 form and attach themselves to the raisins. These act like floats for the raisins and together they rise to the surface. Here, the gas bubbles burst into the air, leaving the raisins without their floats to sink again.

The process repeats and the raisins dance up and down! This will continue only whilst the drink is still fizzy – as more bubbles burst at the surface, fewer remain in the drink, until eventually it will become 'flat'.

Encourage your children to try other small food items to see which ones float, sink or dance. Broken pieces of spaghetti, numerous other pasta shapes, lentils, uncooked popcorn and some berries will also dance. Look at the surface of each item and try to predict which will work well.







Sailing Boats



ACTIVITY 1 | SAILING BOAT





STEM Learning Objectives:

Science:

Explore resistance in water by making and testing a boat.

Technology:

Use a range of tools, equipment, materials and components.

Engineering:

Understand the forces acting on a sailing boat.

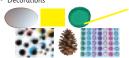
Maths:

Measuring and marking out.

WHAT YOU NEED:

Materials:

- Polystyrene foam pizza disc
- A4 coloured card
- Plastic milk bottle lid
- Wooden skewer Decorations



- Low melt glue gun
- Ruler
- Felt tip pens
- Large scissors
- Lump of poster tack
- Hole punch



Can you spot any hazards? How can you reduce the risks?

WHAT YOU DO:

- 1. Use the felt tip and ruler to draw a boat shape on your pizza disc. Make it as long as the disc and quite wide to help prevent the boat capsizing. Cut out the boat base.
- 2. Place the poster tack on the table and press a bottle lid onto it with the open side downwards. Press down with the pencil to make a small hole in the middle. Don't make the hole too big as it needs to be a tight fit on the skewer.
- 3. Take out the poster tack and glue the lid down towards the front of the boat base. Push the pointed end of the skewer down through the hole in the lid and into the base.
- 4. Cut the sheet of coloured card so that it is shorter than the skewer, and trim it to your preferred shape. You can decorate it with a felt tip pen. Punch a hole in the middle of the top and bottom, then slide the sail onto the skewer.
- 5. Place the boat in the water tray and blow into the sail to make it move across the water. You can customise your boat by adding a sailor, flag, decorations etc. You could try to help it move faster, for example by changing the shape of the base to make it more streamlined.











STEM Explanation:

Gravity acts downwards on the boat, pulling it down onto the water.

The boat base is made from polystyrene foam pizza disc; this contains lots of little air pockets, making it buoyant so that it doesn't sink

When you blow into the sail the boat moves across the water.

The resistance of the water (drag) slows the boat down.

If you make the boat more streamlined (e.g. by making the front pointed and rounding off the corners) this reduces the drag so the boat can go faster.



,	
Draw and annotate your sailing boat here:	
	_ /
,	
Explain two improvements you could make to your boat:	
Explain two improvements you could make to your boat:	•
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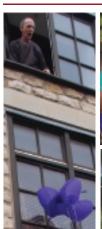


Egg Parachutes



ACTIVITY 5 | EGG PARACHUTE











STEM Learning Objectives:

Science:

Explore falling objects and the effects of air resistance.

Technology: Engage in an iterative

process of designing and making.

Engineering:

Design, make, test and improve a product.

Maths:

Measure time; compare duration of events.

Can you spot any hazards? How can you reduce the risks?

WHAT YOU NEED:

Materials:

- Large piece of thin material, e.g. broken umbrella with the spokes removed, bin bag, part of an old lightweight raincoat
- Plenty of packaging material, e.g. bubble wrap, packaging foam, cotton wool, egg box, yogurt pot,
- Thin string
- A hard boiled egg
- A raw egg



Tools:

- Scissors
- Transparent sticky tape
- Stopwatch







WHAT YOU DO:

The aim is to construct a parachute to allow an egg to be dropped out of an upstairs window onto a hard surface without it breaking. Here are some suggestions:

- 1. Tie four or more strings near the corners or edges of the piece of thin material so that it will act as a parachute.
- 2. Use the hard boiled egg initially. Package it well, particularly underneath, to cushion the impact when it lands.
- 3. Attach the other end of the strings to the egg package or basket without getting the strings tangled up!

Ask an adult to hold the parachute by the middle, with the egg package hanging down, drop it out of an upstairs window onto hard ground (e.g. concrete). Time the descent of the egg and then check whether it has broken.

Modify and improve your design as required; for example you could make a larger parachute to slow the egg down more (time the descent to see if this has increased). You could change the number of strings or re-position them to improve your parachute, and/or use more packaging underneath the egg.

Once you are happy with your design, place the raw egg in the package instead of the hard boiled egg. Once it has descended, check whether the raw egg has broken.





STEM Explanation:

The egg and parachute are pulled downwards by gravity.

As they move down the air pushes against them.

The parachute is relatively large; the air resistance gives rise to an upward pull, slowing down the descent of the

The egg must be packaged well to absorb and cushion the impact when it hits the ground.

To prevent the egg from breaking, you can try increasing the air resistance cushioning the egg better, or both.



/	•
Draw and annotate your parachute here:	
Draw and annotate year paragraphs.	
~	J
,	•
What was the result of your first test?	,
what was me result of your mist lest:	i
	i
	i
	i
	i
	i
	,
<i></i>	
,	١
Explain how you improved or refined your design:	
	J



Core Movements

Work through these stretching activities every day and fill in your fitness log. Ask your Parent or Guardian to sign off your activity.





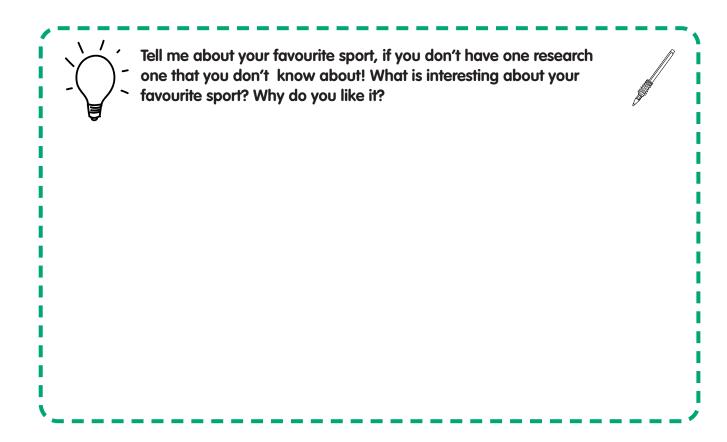


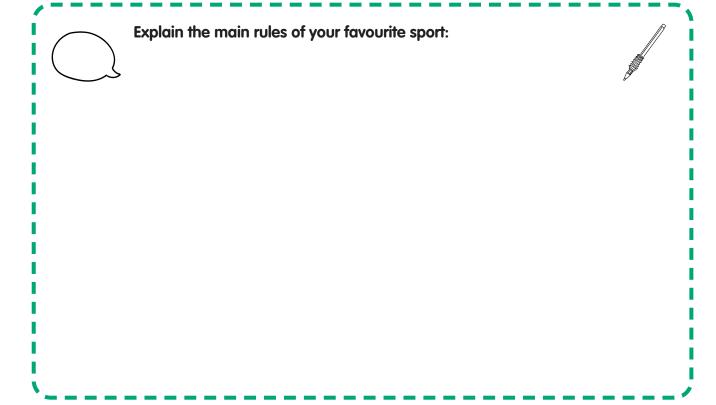


Day	Number of Reps	Signed

Your Favourite Sport

Do you play a sport for school? Or as part of a club outside of a school? Do you watch a sport on TV or live sporting events? What is your favourite sport?





	<u> </u>
Draw a picture to show me your favourite sport:	
] 	
I I	
] 	
V	/
Who do you admire that plays this sport?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	
Who do you admire that plays this sport? Can you tell me something about them? Why do you admire them?	



The Olympics

The Olympics began in Ancient Greece and ran every four years from 776BC to at least 393AD. The modern Olympic Games also began in Greece in 1896, taking place in Athens.

Over 200 nations now compete in the Summer and Winter Olympic Games which are held every four years.

The Paralympic games are also held every 4 years in the same year as the Summer Olympics and have done since 1960.

The five interlocking rings in blue, yellow. Black, green and white are known as the Olympic rings and was created in 1913.

The rings represent all the colours of the flags in the world.







Activity

Imagine that you are a sports journalist for your local paper and have been asked to report on an amazing day at the Olympic Games.

Luckily you have a time machine so you can travel to **any** Winter, Summer or Paralympic Games in either the past or the future.

Write up your article in the box provided – remember to lay it out in a newspaper article format.



Bee-Bot at the Zoo

Bee-Bot is having a lovely day at the Zoo! It is so hot that he has had to stop for an ice cream! But Oh-no! Bee-Bot has lost his map of the Zoo! Can you help him find his way around the animals? Start every activity at the ice cream van and draw the arrows in sequence to build your algorithm.















Forwards	Backw	ards	Left Turn		Right Turn	l	Go		y
Visit the Lions									
			Visit t	he Pa	ndas				
'									
1	Vis	sit the Ti	gers a	nd the	en the	Meer	kats		
`===									
Visit the Polar bears and then the Penguins									





Use the cut-out Bee-Bot from the back of the book to help you.

For more computer science activities check out the Bee-Bot and Blue-Bot App







Information Technology all around us!

Information technology is all around us in our everyday lives!





It's in our pockets....

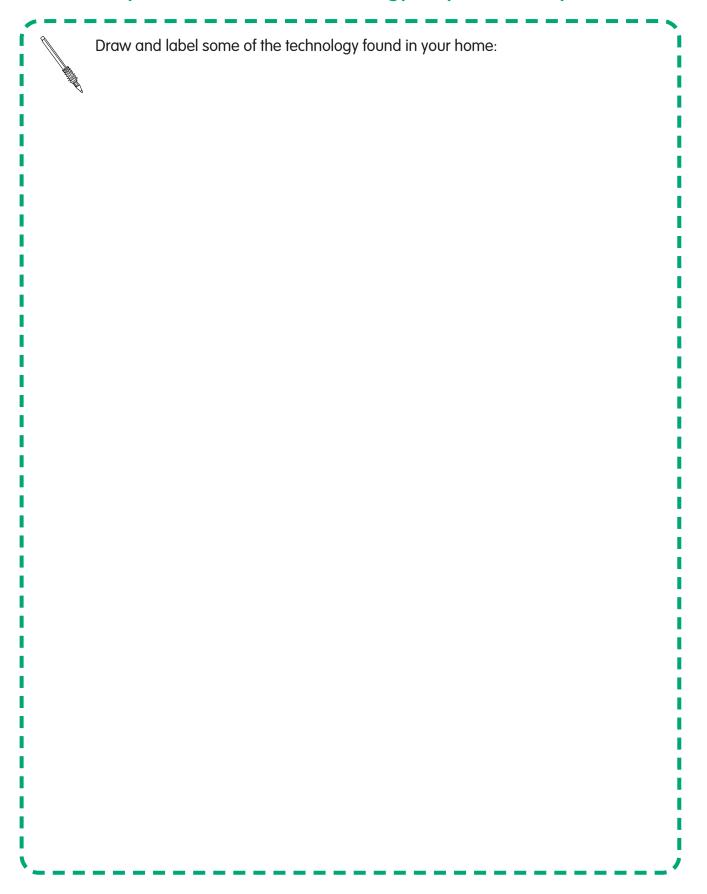
It helps us pay for our food at the supermarket.

We take it on holiday to take photos and record our memories digitally...

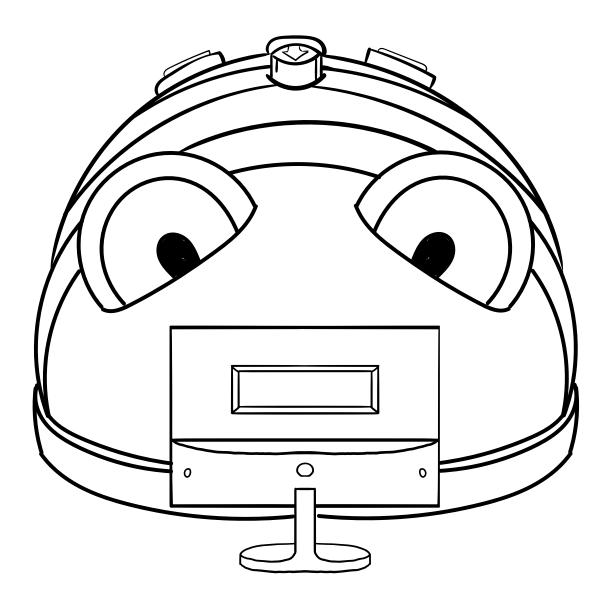




What examples of information technology do you have in your house?







Bee-Bot loves to use the internet. He loves playing games and watching videos of flower gardens. He knows that to stay safe he should follow some simple rules.

- If he is going online he makes sure that someone knows like his big brother Blue-Bot.
- He only talks online to people he knows in real life not strangers.
- If something doesn't seem right or upsets him he lets Blue-Bot know straight away.
- (): If he needs more information he looks online for more information at www.thinkuknow.co.uk/

Create an e-safety poster which could be used in school to help keep your friends safe online:		



Our World - Night and Day

Our world – Night and day

Our planet Earth takes a year to orbit the Sun. As it does this, it spins on its axis once every 24 hours, giving us night and day.

Earth Tokyo 20:00 (+8 hours) December When you're going to bed someone else is just starting their day! These clocks show the time in different parts of the world when it is midday in London, U.K. S As the Earth makes its yearly orbit, places tilted away from the Sun get less hours of daylight while those tilted towards it, get more. London Midday 12:00 (-5 hours) New York 07:00 Light rays Hours of daylight Los Angeles 04:00 -8 hours All in a day The Earth spins on its axis every 24 hours. Places which face towards the Sun get daylight. Places which face away from the sun get night. Night and day June z Earth

04 GOO Teaching Atlas

GOO Teaching Atlas 05

2 Why is it daytime on one side of the Earth when it's night time on the other?

1 Why does it get dark?

(?) Questions

1 Make a table comparing differences between night and day where you live: for example, think about what people and animals do.

Challenges

Write a short diary of your day and say what the time is.

S. Work out what time it is in New York when you start and finish school.

Key words

AxisEarthOrbitSun

(2) Challenges

1 Make a table comparing differences between right and day where you live: for example, think about what people and animals do.

2 Write a short diary of your day and say what the time is.
3. Work out what time it is in New York when you start and finish school.





1 Why does it get dark?

- 2 Why is it daytime on one side of the Earth when it's night time on the other?

Pacific Ocean **Disputed borders** Some borders are agreed with everyone in the international Ocean Indian 5000 km ANTARCTICA Ocean 4000 2000 3000 Southern 1000 Atlantic Ocean AMERICA NORTH Country boundary Continent Country bou Pacific Ocean Key With no road, only forest and marshland, the 100-kilometre-wide Darlén Gap, between the countries of Panama and Colombia, makes travel hard for people and goods. **Border control UK** The Darién Gap appeared that you can call your own! Give this new country a name, design a flag and draw a map of it to show its places and features. Match each continent shown on a globe with those shown on the 1 Which continent do we map and say what you 2 What would happen if and have a section for each continent, where the world didn't have any borders? you can add some important facts. Challenges Design a passport 3 A new island has (🌸 Questions **Key words** International live on? Continent can see. Country Border

Work through the questions and challenges.

GOO Teaching Atlas

community. Some borders, like that between Israel and Palestine,

A border control is where the movement of people, animals and goods in and out of a country can be monitored. People arriving from another country usually have to show their passport to get in or out.

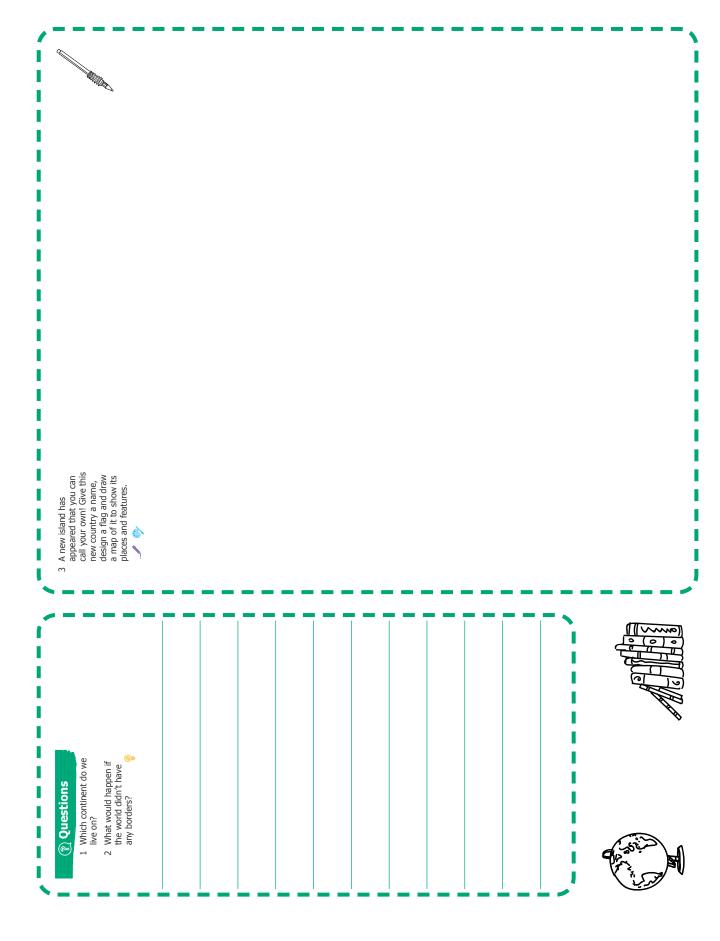
are argued over for many years.

ලඵල Teaching Atlas

08 %gogy

A continent is a huge expanse of land. The world is divided up into seven continents. Continents are divided up into countries.

World – Continents





What a Wonderful World

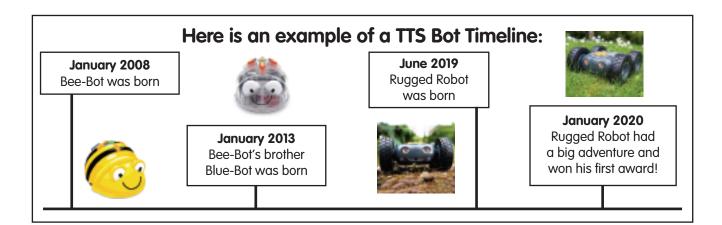
Create an A to Z of words all linked to our wonderful world! Why not illustrate your A to Z too!			
A			
B			
C			
D			
E			
F			
G			
J			
K			



M	
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X	
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Z	

My Timeline

A timeline is a listing of events in **chronological order**. This means that the events are shown in the order that they happened.





Think about your life and write a list of key events that have happened, for example when you were born, a special birthday, starting school.



Draw a timeline showing the key events in your life.

Draw pictures for each key event and remember to include the date.



Learning About The Past

Lots of things about life change very quickly. A great way to find out about the past is to ask people about their lives and compare this to our own.

Interview someone in your family who is older than you and ask them all about their life growing up.



Record what you learn in the box below by either sticking in photos, drawing pictures or writing facts

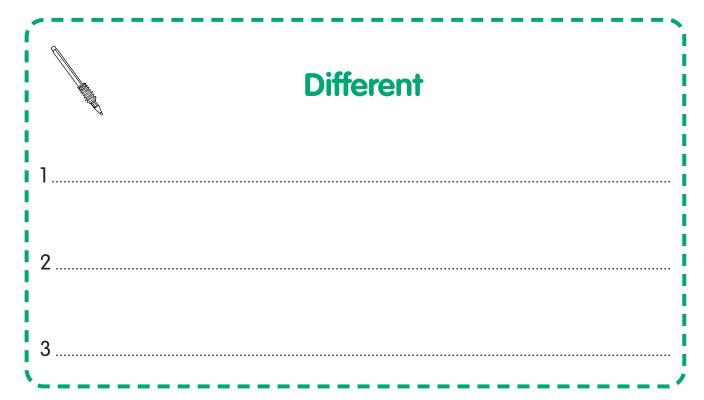
Remember to use the W questions:

Who? What? When? Why? Where?



Think about everything you have learnt about life in the past and write down 3 things that are the same and 3 things that are different to life now.





Past, Present, Future

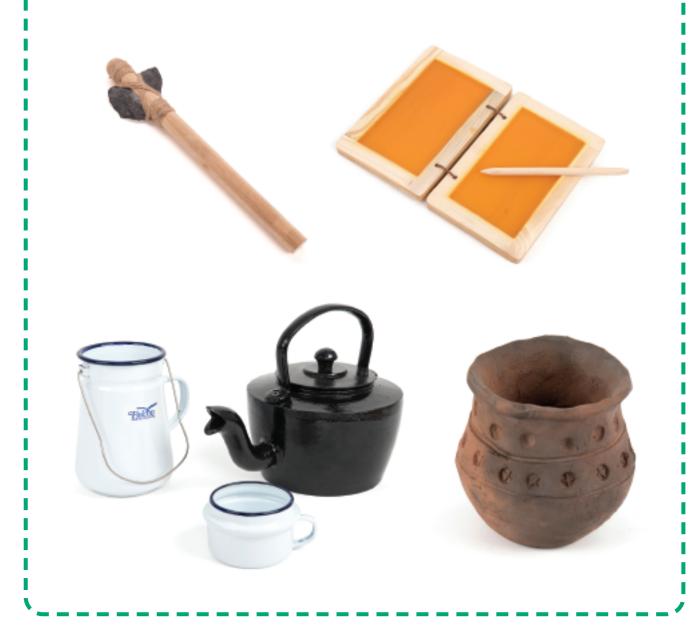
We can learn a lot about the past by looking at artefacts and thinking about how they were used.



Look at these images of artefacts from the past.

For each artefact think about and discuss these questions:

- What do you think it was used for?
- Who may have used it?
- How long ago do you think it was used?





Now look at objects in your home.

- In the first box draw a picture of what it looked like in the past.
- In the middle box draw a picture of what it looks like now (present).

In the last box draw what you think it might look like in the future.				
Television				
Past	Present	Future		
Washing Machine				
Past	Present	Future		
Telephone				
Past	Present	Future		

