



Birches First School

Believe, Grow, Succeed



School Closure Home Learning

Year 4 Daily Tasks

Date: 1/6/20

Reading task – retrieve and record information in a text.

You need to read the text below about how rainbows are formed then fill out the given table – make sure you understand the text – you will be explaining it later this week!

How are Rainbows formed?

Rainbows, magical and mystical. Or are they? Here, we explain how rainbows are formed.

First, it's important to understand that there is actually nothing magical about how rainbows are formed. That mysterious rainbow you saw has a fairly straightforward scientific explanation.

Rainbows happen when sunlight and moisture in the air combine in a very specific way. Sunlight is actually made up of different colours that we don't usually see. When a beam of sunlight comes down to Earth, the light is white. But if the light beam happens to hit raindrops on the way down at a certain angle, the spectrum of seven different colours that make up the beam separate so that we can see them — in the form of a rainbow.

When the light hits a particle of water in the air, it refracts (bends), then reflects (back towards the direction it entered the water particle). Next, the light then refracts again and exits the raindrop as one of the seven colours of the light spectrum.

The angle for each colour of a rainbow is different, because the colours slow down at different speeds when they enter the raindrop. This is because each colour has a different wavelength of light. The light exits the raindrop in one colour, depending on the angle it came in, so we see only one colour coming from each raindrop. Light at different angles coming through many raindrops form the rainbow that we see, in stripes of red, orange, yellow, green, blue, indigo and violet.

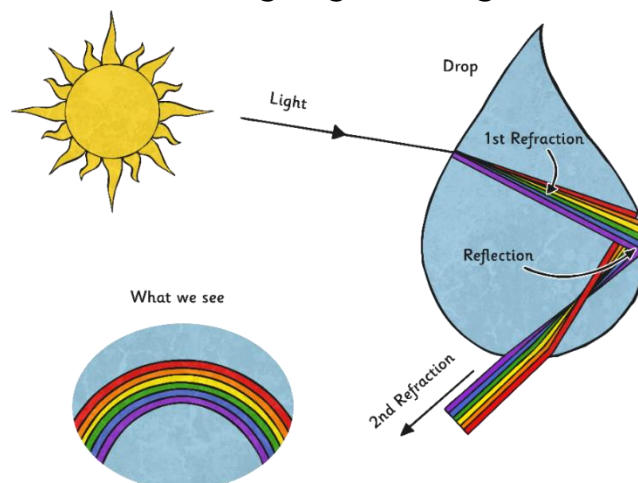
Did you know that...

If you were to look at a rainbow from above, it appears as a halo of light, not the arc shape that we see from the ground.

Rainbows can be seen not just in rain but also mist, spray, fog, and dew, whenever there are water droplets in the air and light shining from behind it at a particular angle.

A rainbow is not an object, it cannot be approached or physically touched.

Sir Isaac Newton identified the 7 colours of the visible spectrum that together make up white light. They are all present in every rainbow in the order: red, orange, yellow, green, blue, indigo and violet.



Fill in the table -

<u>What is the text about?</u>					
<u>Purpose/Genre of text</u>	information	persuasion	report	instructions	explanation
<u>Write 5 pieces of key information from the text.</u>					

Writing/SPaG task

Word search – spelling challenge words

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

length

history

separate

strength

different

suppose

knowledge

purpose

difficult

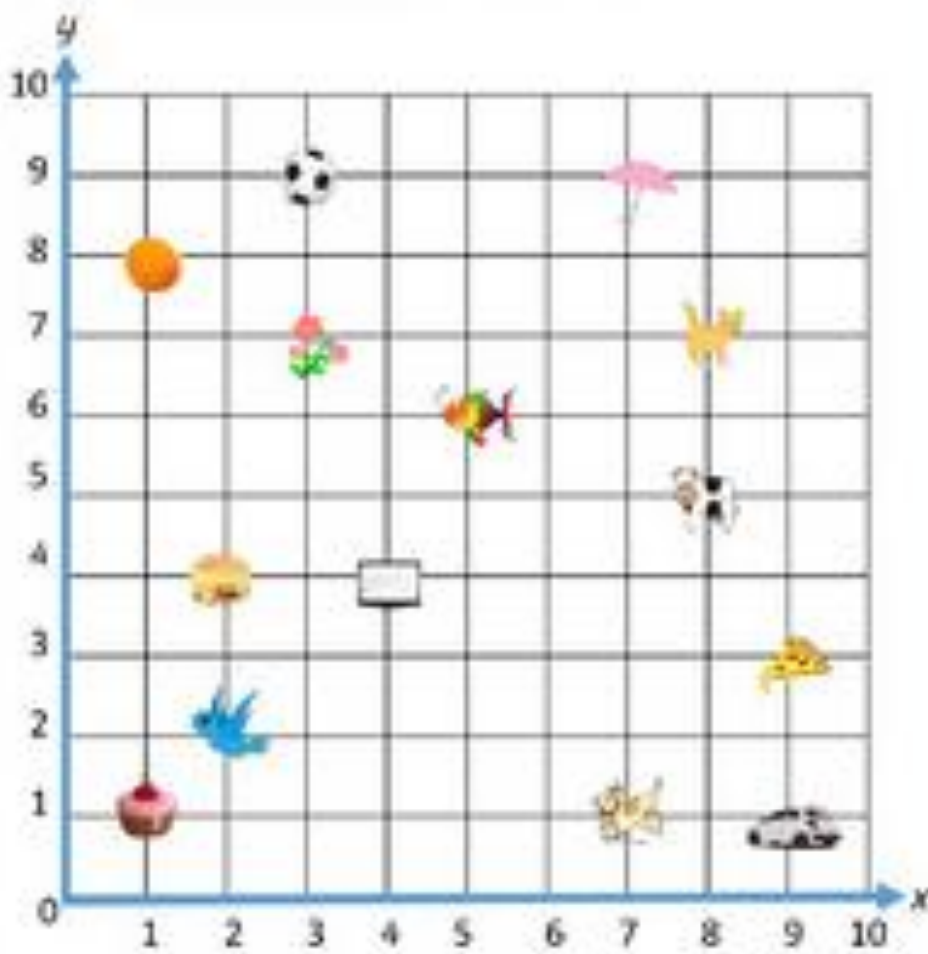
therefore

Extension – practise spelling these words using 'Look, cover, write, check'.

Maths task

Position and direction

Today we are starting to look at co-ordinates. We read coordinates by reading the x-axis first and then the y-axis. We put the coordinates inside brackets and separate them with a comma. They are displayed in a quadrant, like this -



The football is at point (3,9).

3 is the line on the x-axis and 9 is the line on the y-axis.

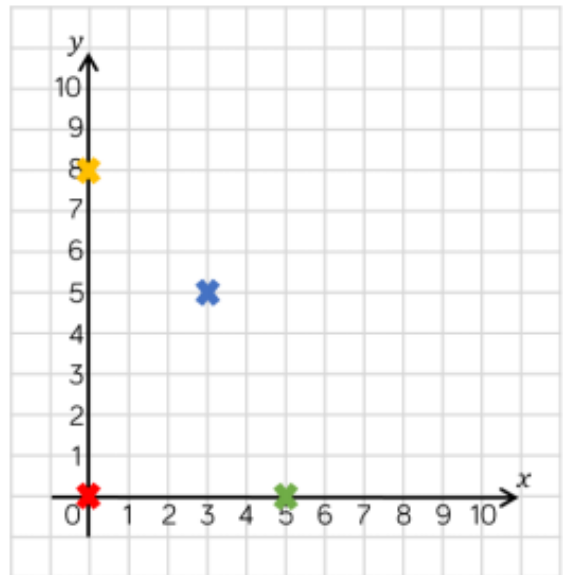
The cow is at point (8,5).

Get your grown up to question you about the points for other objects on the quadrant.

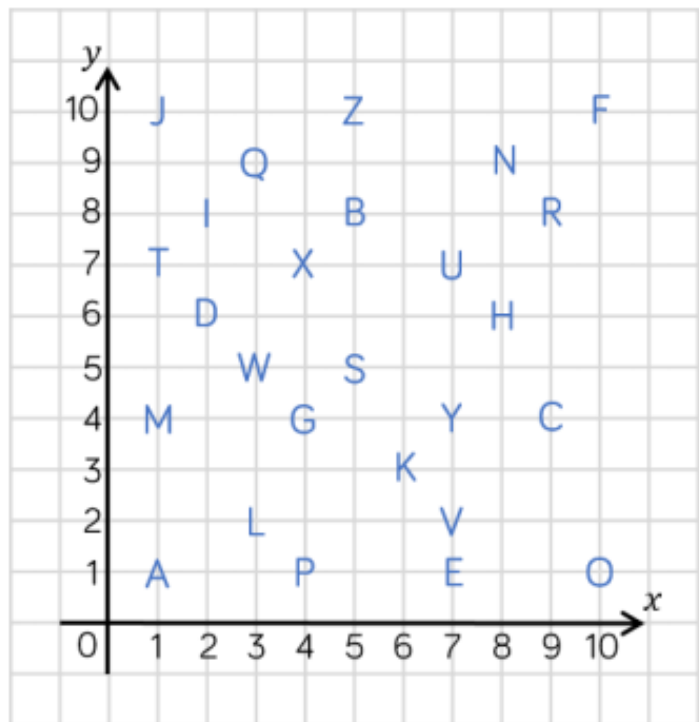
Write the coordinates for the points shown.

✖ (__ , __) ✖ (__ , __)

✖ (__ , __) ✖ (__ , __)



Write out the coordinates that spell your name.



The point is plotted at (7, 3)



Teddy



Rosie

The point is plotted at (3, 7)

Who is correct?

What mistake has one of the children made?

Fancy some Science?

Living things and their habitats –

- What's your favourite animal? Predict the best habitat for you animal and research to see if you are right.
- How many different habitats can you name? Which animals are suited to which habitats and why? How do the different habitats provide for the basic needs of different animals and plants?
- <https://www.bbc.co.uk/bitesize/topics/zbnnb9q>
- Make a habitat diorama. Here are some examples –

