



Birches First School

Believe, Grow, Succeed



School Closure Home Learning

Year 4 Daily Tasks

Date: 2/6/20

Reading task – retrieve and record information in a text.

You need to read the text below on 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.

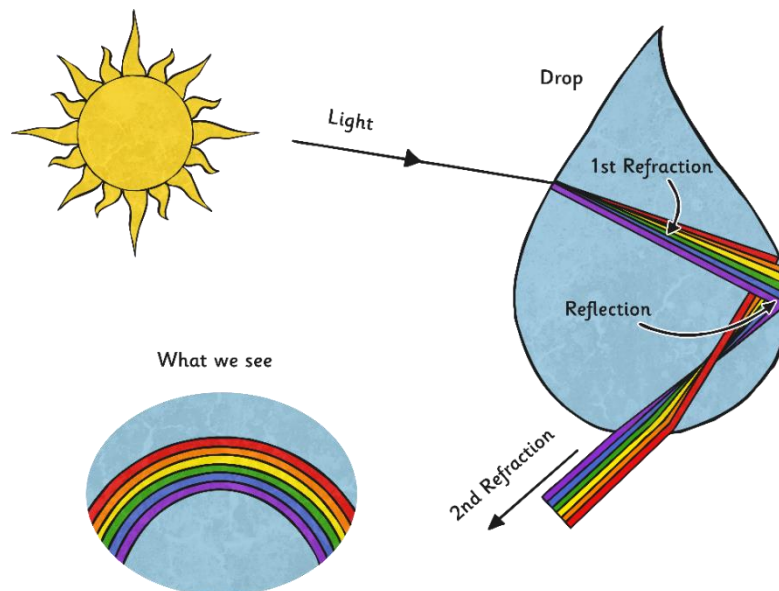
Did you know that...

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 -

| | |
|--|--|
| <p><u>Write a summary for the rainbow text</u></p> | |
| <p><u>Write three questions to research this subject</u></p> | |

Writing/SPaG task

1) Read the sentence below. What type of word is 'strict'? **Tick one.**

I hope we have Mrs Wilson next year. She is a very strict teacher but she is fair.

noun

adjective

preposition

2)

Who does the pronoun 'her' refer to in the passage below? **Circle one option.**

Mum and Gran drove Caroline back to Bristol last night. It is time for her to go back to college.

Mum

Gran

Caroline

3)

Tick the sentence which uses direct speech.

"Let's make a treasure hunt," said Dad.

Freddie said that we couldn't go through the park.

4)

Add the correct **punctuation** to the sentence below.

Come on everyone shouted Charlotte Dinner is ready

5)

Do the noun phrases in the table indicate **singular or plural possession**? Tick one box for each example.

| Noun Phrase | Singular Possession? | Plural Possession? |
|---------------------|-----------------------------|---------------------------|
| the teacher's mug | | |
| the children's hats | | |
| the waiter's apron | | |
| the animals' food | | |

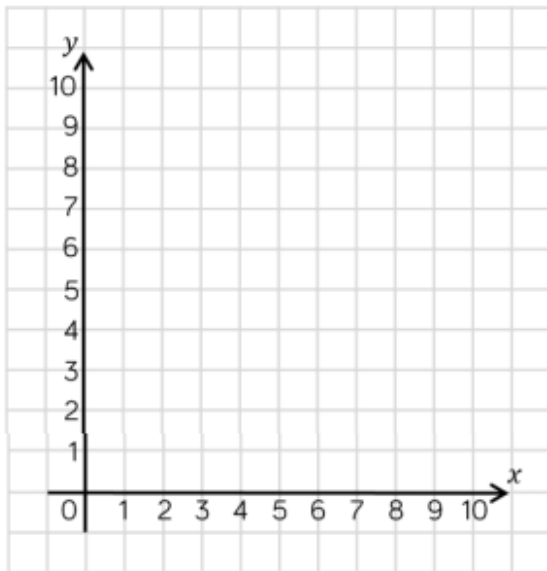
Maths task

Position and direction

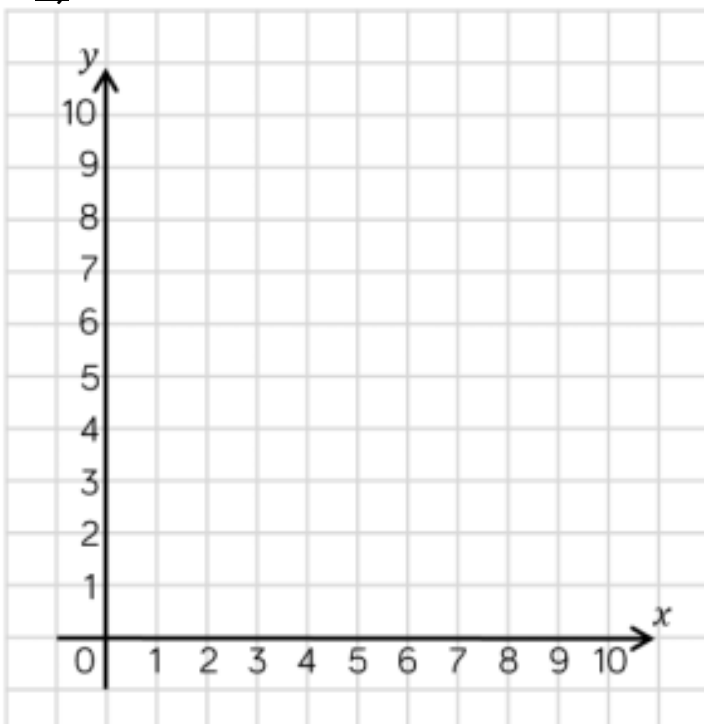
Now that we've had a go at reading coordinates we are going to attempt to draw them. If you do not have access to a printer you could work with your grown up to discuss and point to where you would place things on the given grid.

1)

Draw the shapes at the correct points on the grid.



2)



Plot these points on a grid.



(2, 4)

(4, 2)

(5, 8)

(7, 6)

What shape has been created?

3)

When you are plotting a point on a grid it does not matter whether you go up or across first as long as you do one number on each axis.



Amir

Do you agree with Amir?
Convince me.

Extension - <https://mathsframe.co.uk/en/resources/resource/469/Coordinates-Alien-Attack>