

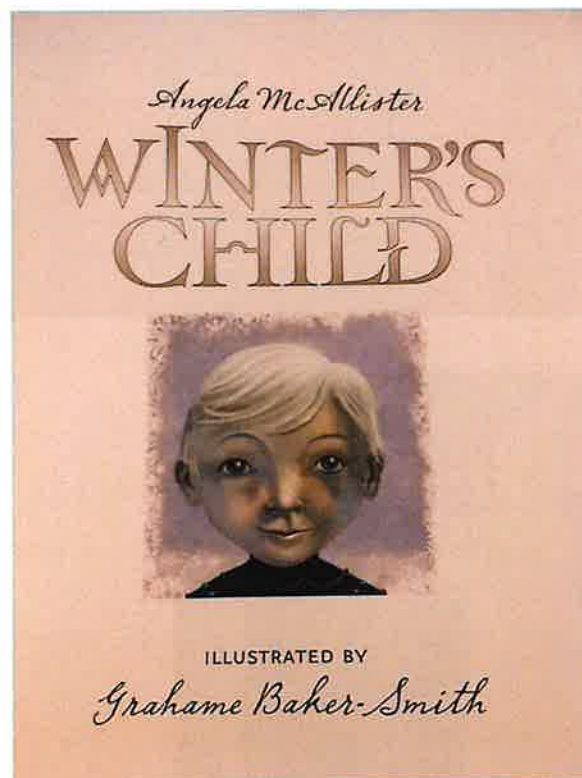
Winter's Child

WALT: Can I understand the problem in a story?

Today, you will be reading through a book called Winter's Child. Look at the front cover.

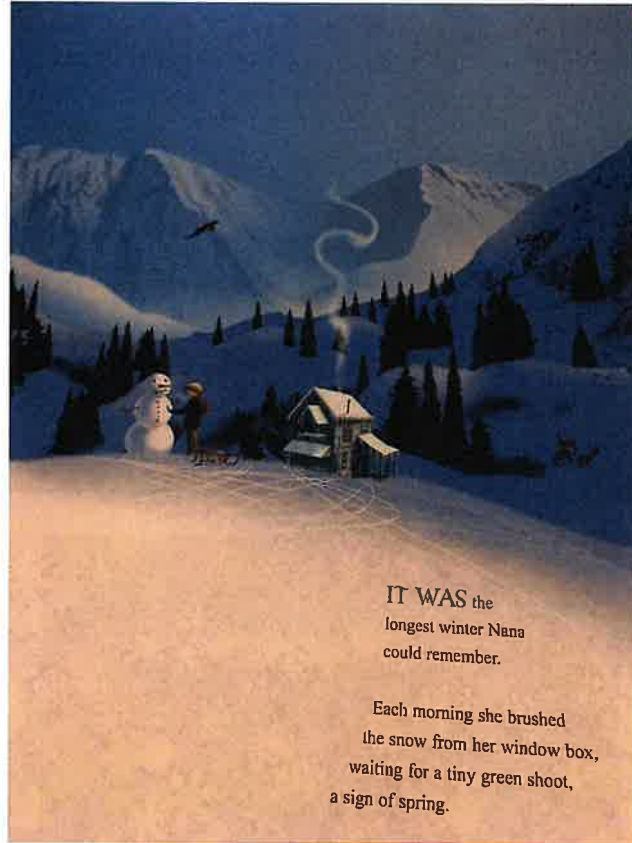
Who is the author?

What does it mean by illustrator?



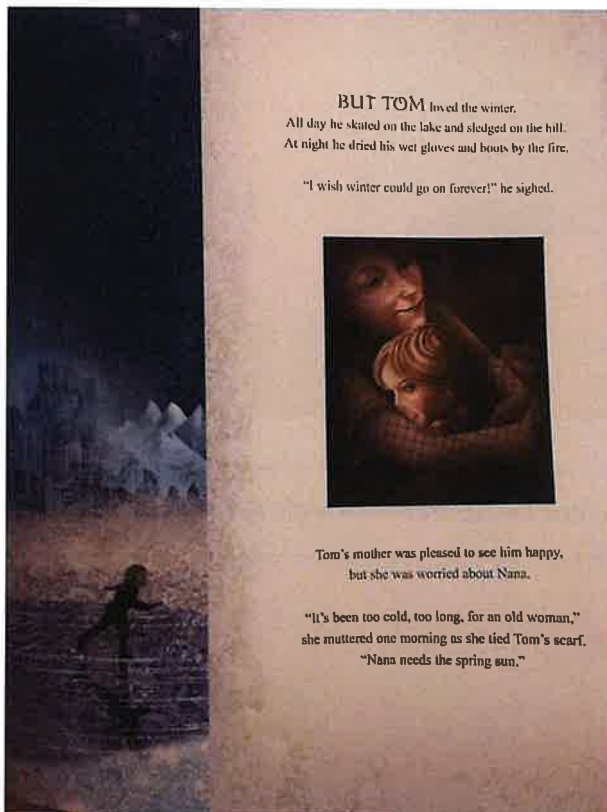
An illustrator is the person who draws the pictures! Who is the illustrator in this book?

Winter's Child



IT WAS the longest winter Nana could remember.

Each morning she brushed the snow from her window box, waiting for a tiny green shoot, a sign of spring.



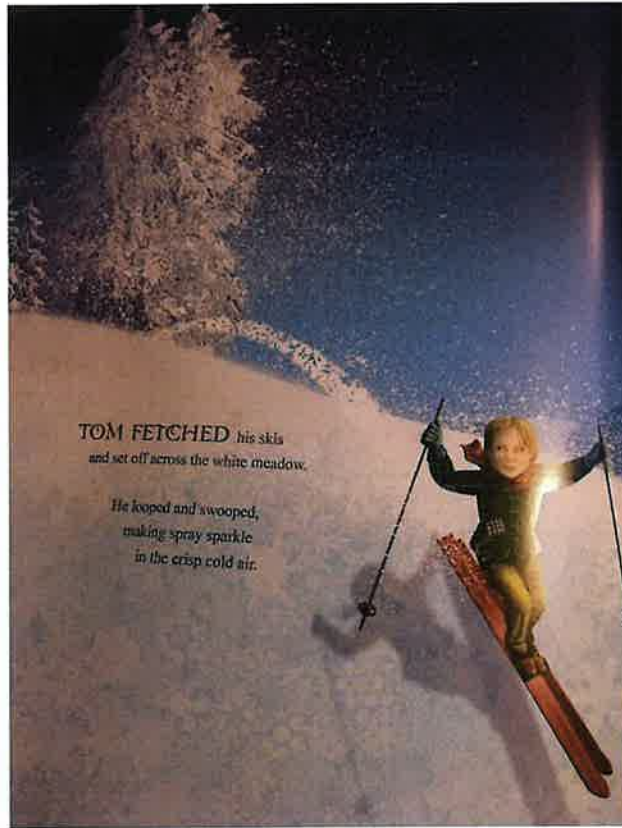
BUT TOM loved the winter. All day he skated on the lake and sledged on the hill. At night he dried his wet gloves and boots by the fire.

"I wish winter could go on forever!" he sighed.



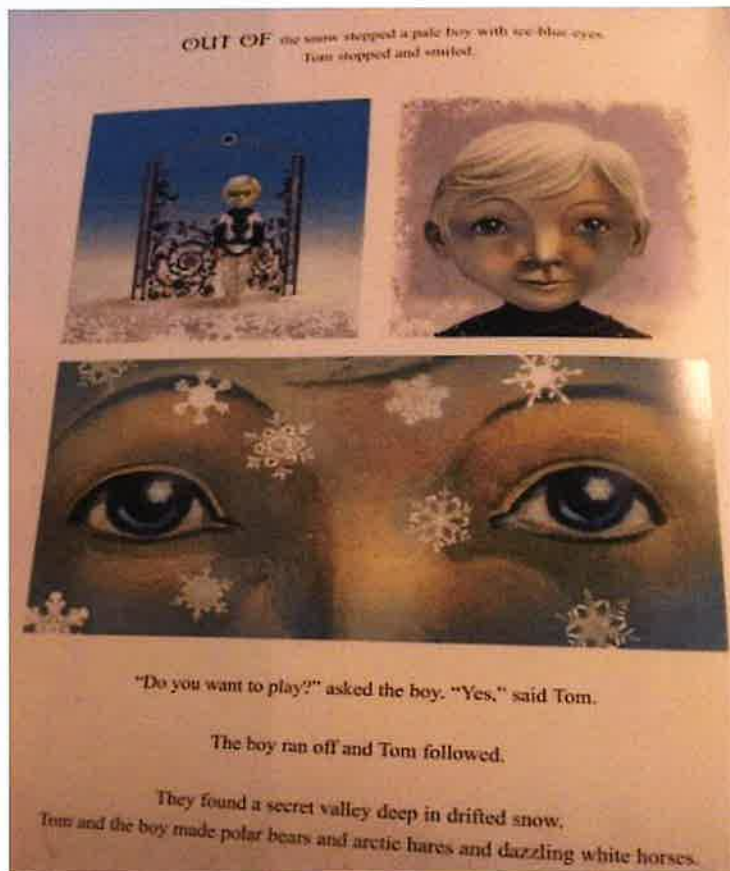
Tom's mother was pleased to see him happy, but she was worried about Nana.

"It's been too cold, too long, for an old woman," she muttered one morning as she tied Tom's scarf. "Nana needs the spring sun."



TOM FETCHED his skis
and set off across the white meadow.

*He looped and swooped,
making spray sparkle
in the crisp cold air.*

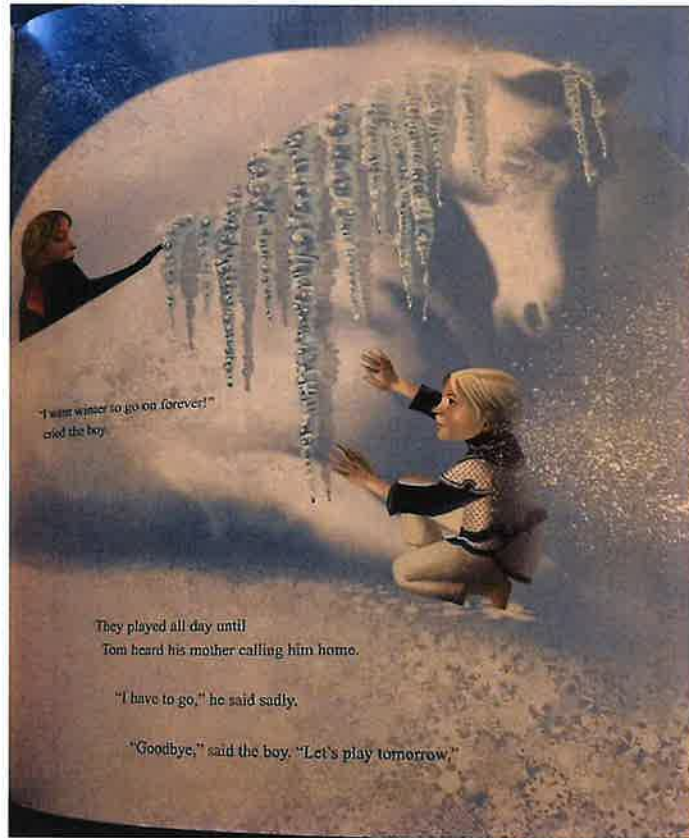


OUT OF the snow stepped a pale boy with ice-blue eyes.
Tom stopped and sniffed.

"Do you want to play?" asked the boy. "Yes," said Tom.

The boy ran off and Tom followed.

They found a secret valley deep in drifted snow.
Tom and the boy made polar bears and arctic hares and dazzling white horses.

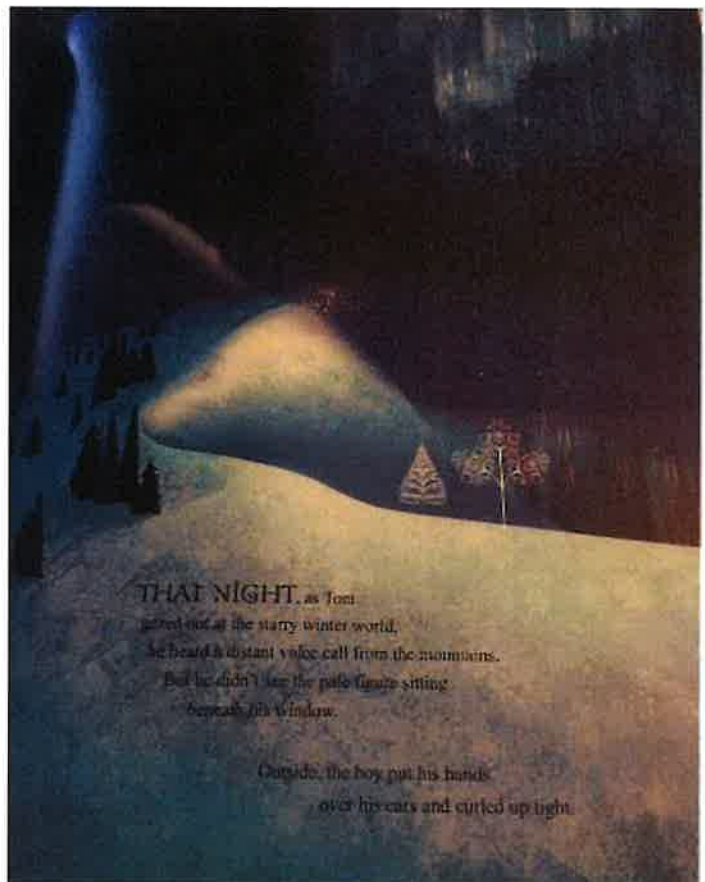


"I want winter to go on forever!"
cried the boy.

They played all day until
Tom heard his mother calling him home.

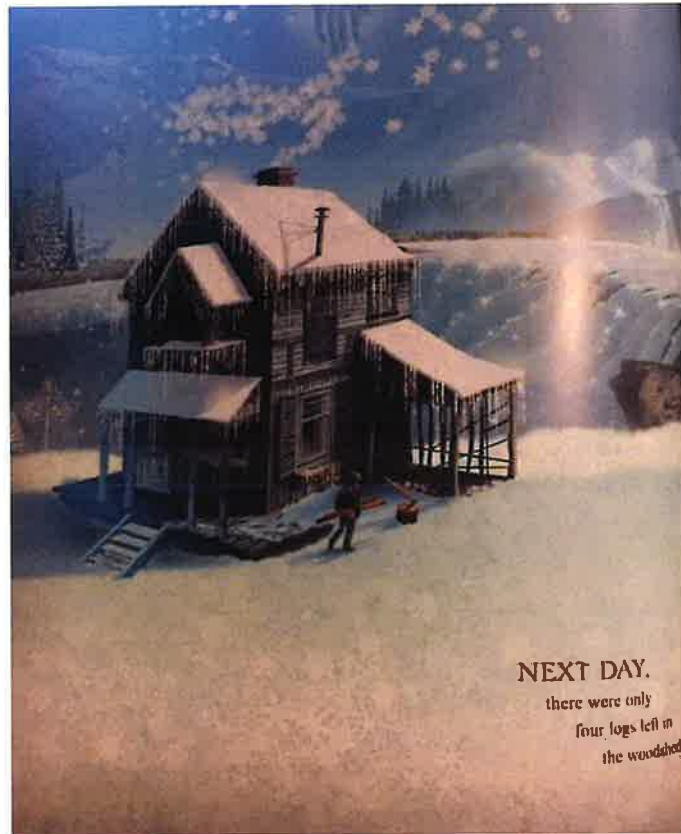
"I have to go," he said sadly.

"Goodbye," said the boy. "Let's play tomorrow."



THAT NIGHT, as Tom
gazed out at the starry winter world,
he heard a distant voice call from the mountains.
But he didn't see the pale figure sitting
beneath his window.

Outside, the boy put his hands
over his ears and curled up tight.



NEXT DAY,
there were only
four logs left in
the woodshed.

“What will we do?” Tom’s mother sighed.
“If the spring sun doesn’t come soon,
how will we keep Nana warm?”



Tom went out and chopped up his wooden skis for firewood.
“I’m too old for these now,” he told Nana.

Then Tom went out to play.

Use the text to answer some of these questions.

What season is the story set in?

What is Nana hoping for?

How did Tom feel about winter?

What made Tom sad?

What do you think the distant call was? Whose voice could it be?

What do you predict will happen next?

What is the problem in our story?

Fill in the sheet in your pack.

What is the main problem in this story so far?



Why can Winter can be a problem?

Lesson 1 Week 3

WALT: Can I multiply by 4?

Over the next 2 weeks we are going to revise some of the methods we have learnt during Year 3 so far. When we multiply by 4 we can use lots of different methods to help us, we might use repeated addition, the 4 times tables or even the 2 times tables.

What multiplication number sentence are these repeated addition number sentences representing? Work out the answers to them too.

Example

$$4 + 4 + 4 = 4 \times 3 = 12$$

Now try these...

$$4 + 4 =$$

$$4 + 4 + 4 + 4 + 4 =$$

$$4 + 4 + 4 + 4 + 4 + 4 + 4 =$$

$$4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 =$$

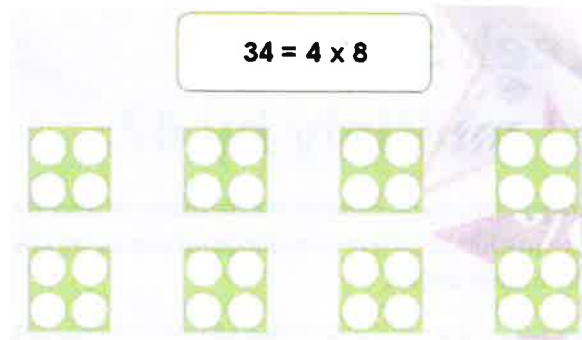
Let's have a go at this...

Fill in the missing numbers on the number track. Some are going backwards so look carefully!

48	44			32	
24		16		8	

True or false?

Look at the image below to help you solve the problem. Count the images to help you work it out.



Now try this!

Sort the tennis balls into groups of 4 and complete the number sentence.

_____ lots of _____ = _____



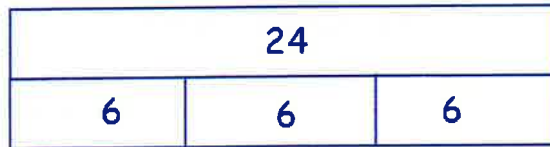
Reasoning and Problem Solving

Try this problem!

Jack has 24 seeds.

He plants 4 seeds in each pot.

Which bar model matches the problem?



Now, have a go at the work sheet in your pack!

WALT: Can I multiply by 4?

Show the 4 x table on the number line. Then use this to help you solve the problems below.



What do you see? Write the multiplication number sentences.



How long is the long blue line?

= 4cm

= _____

_____ x _____ = _____

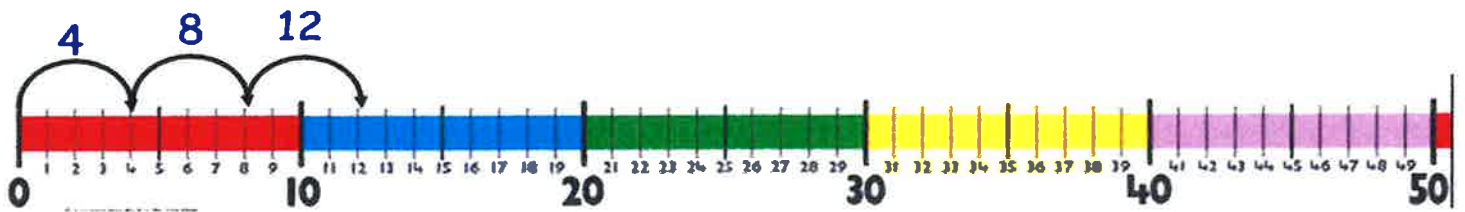
Complete the repeated addition or multiplication number sentence

Multiplication	Repeated addition
e.g. 3×4	$4 + 4 + 4 = 12$
7×4	$4 + 4 + 4 + 4 + 4 + 4 + 4 = 28$
	$4 \times 4 = 16$
	$4 \times 4 = 16$

Day 1 Week 3

WALT: Can I multiply by 4?

Show the 4 x table on the number line. Then use this to help you solve the problems below.



What do you see? Write the multiplication number sentences.



How long is the long blue line?

 = 4cm



___ x ___ = ___ or ___ x ___ = ___

___ x ___ = ___ or ___ x ___ = ___

Complete the repeated addition or multiplication number sentence.

Multiplication	Repeated addition
e.g. 6×4	$4 + 4 + 4 + 4 + 4$
7×4	
	$4 + 4 + 4$
	$4 + 4 + 4 + 8$
	$16 + 4 + 4$

There are 4 biscuits in a pack. Nicholas buys 9 packs for a party. How many biscuits does he have altogether?



Fill in the box with < = or >

$4 \times 3 + 2$ $4 \times 3 - 6$

6×4 $2 \times 4 + 5$

Red Hot Challenge!

Explore the problem using cubes or counters. Then record your findings in your book.

Sally baked some buns in 4s, she had 3 left over. She counted them in 5s and had 4 left over. How many buns did she have?

Natural or Human-Made Rocks

Brick



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Granite

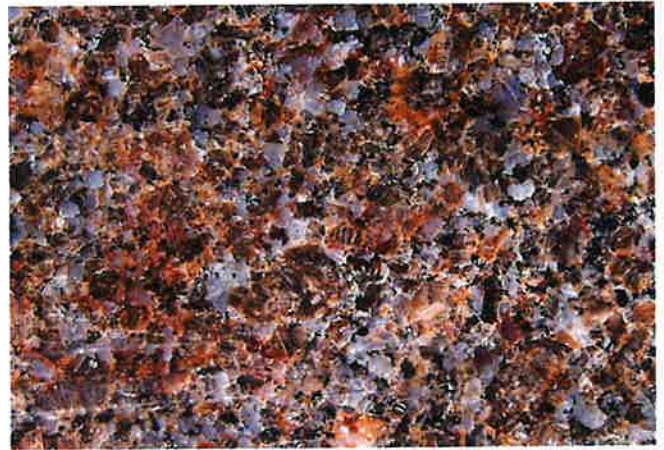


Photo courtesy of James Bowe - granted under creative commons licence - attribution

Chalk



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Marble



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Concrete



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Obsidian



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Natural or Human-Made Rocks

Coade Stone



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Sandstone



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Quartzite



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Basalt



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Limestone

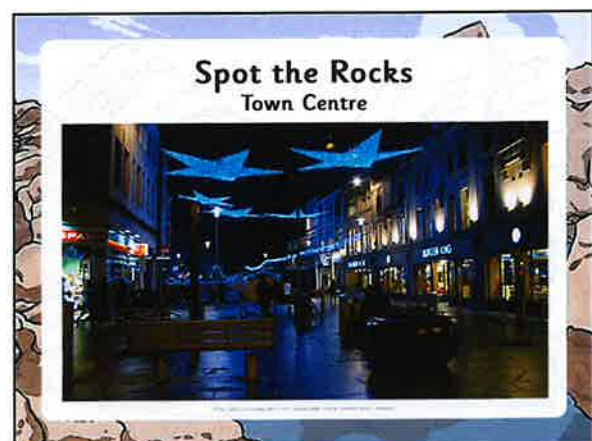
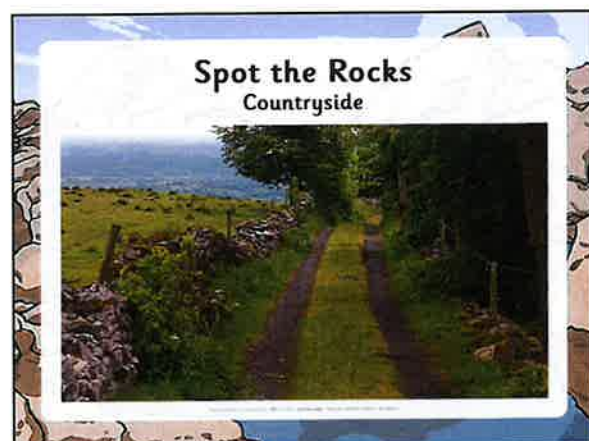
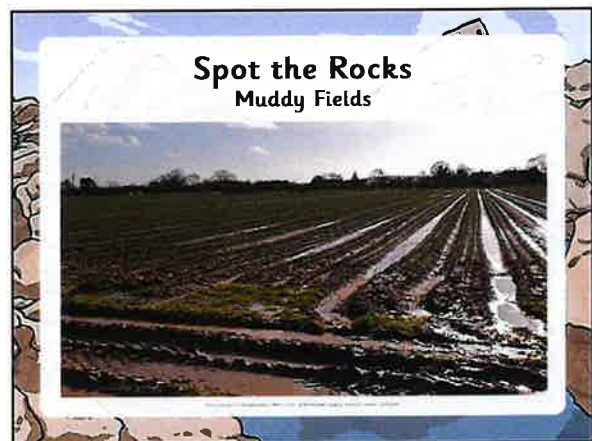
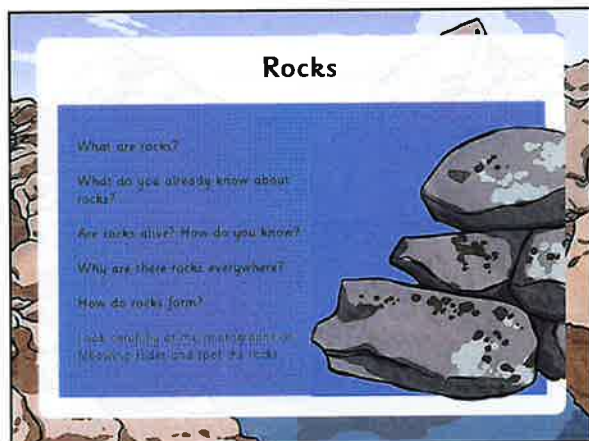
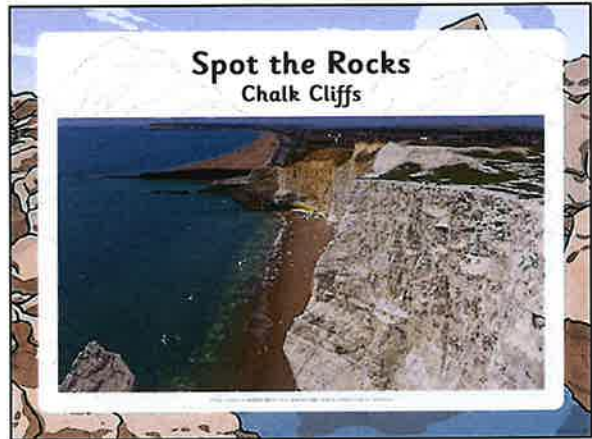
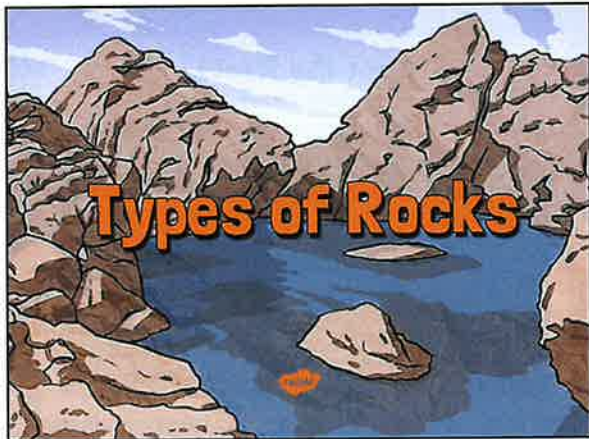


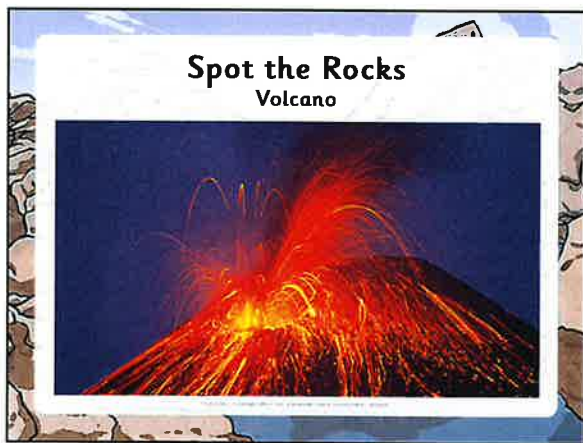
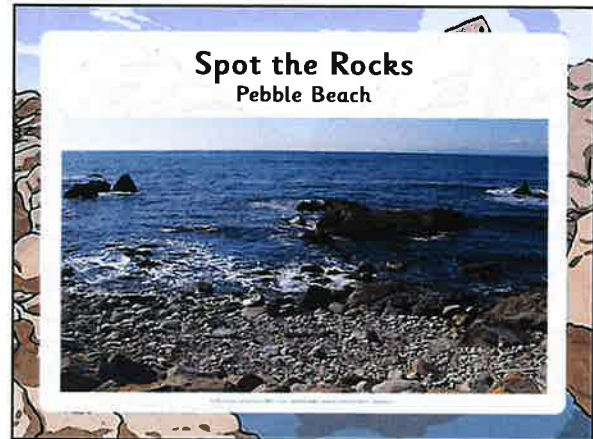
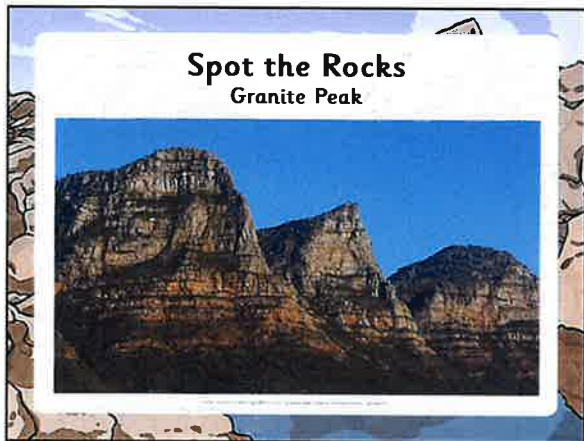
Photo courtesy of James St. John (@flickr.com) - granted under creative commons licence - attribution

Slate






Photo courtesy of Vincent Anciaux (@commons.wikimedia.org) - granted under creative commons licence - attribution

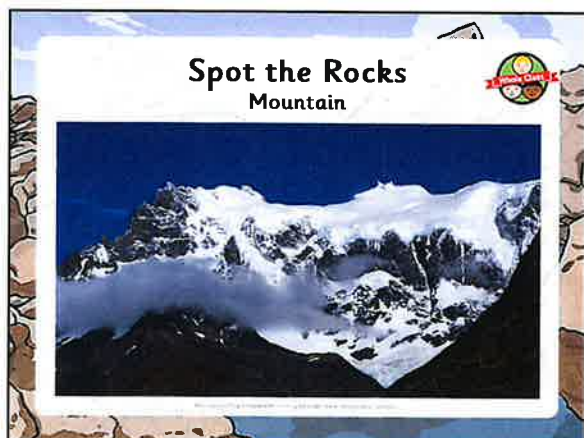




Natural Rocks

There are three types of naturally occurring rocks

 <p>Igneous</p>	 <p>Sedimentary</p>	 <p>Metamorphic</p>
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Natural Rocks

Igneous Rock

... Far under the ground, the temperature is hot enough to melt the rock into a liquid. This is called molten rock. Igneous rocks are formed from this molten rock in two ways:


<h4>Intrusive Igneous Rocks</h4>  <p>Molten rock that remains underground is called magma. When magma cools and hardens it becomes a type of intrusive igneous rock. (Intrusive = internal = inside)</p>	<h4>Extrusive Igneous Rocks</h4>  <p>Molten rock that comes out of the ground is called lava. When lava cools and hardens it becomes a type of extrusive igneous rock. (Extrusive = external = outside)</p>
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Natural Rocks

Sedimentary Rock

Sedimentary rock forms under the sea. The following illustrates the process:


- 1) As a result of weathering and erosion, bits of rock and bits of trees and leaves collect in the bottom of the sea. This process is called **sedimentation**.
- 2) With time, these layers of material are pushed down by the weight of layers of rock. This process is called **compaction**.
- 3) Over time, water is pushed out from these layers and the process of **cementation** occurs. This is when bits of material glue or cement the bits of rock together so they form a solid mass.



Human-Made Rocks

Mock Rock

Victorians created rock gardens and surfaces that looked like rock from **mock rock**. Types of mock rock include **puhanite**, which looked like gritty sandstone. James Puhar, who invented it, took the exact recipe for it to the grave. **Coade stone** (made from grit, flint, quartz, soda lime glass and clay) is another type of mock rock.




Bricks

Bricks have been made for a long time. The first bricks came from a man called Nell Aked in modern day China. That was in 7500 BC! However, bricks were used to build in most of the ancient world and are still used today. Bricks are usually made of clay, sand and lime or concrete materials. They can be of four of the hundred.

Natural Rocks

Metamorphic Rock

Metamorphic rocks form out of existing rocks through heat and pressure. Both processes which can occur together in the deeps buried or separated. This means the rocks are heated and put under pressure, which causes the minerals in the rock to be changed chemically. Collisions of tectonic plates can also result in the formation of metamorphic rocks.




This illustration shows how the igneous rock near magma is being heated and changed.

This illustration shows how the sedimentary rock near magma is being heated and changed.

Natural or Human-Made?

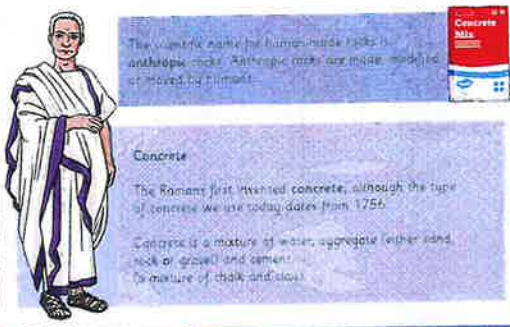
You will be looking at a selection of rocks in groups and will have to decide if they are natural or human-made.

Some of you will also have to answer group the rocks that you think are natural and the other rock types.



Human-Made Rocks

The concrete made for human-made rocks is **anthropic rocks**. Anthropogenic rocks are made, made or moved by humans.















Concrete

The Romans first invented concrete, although the type of concrete we use today dates from 1756.

Concrete is a mixture of water, aggregate (either sand, rock or gravel) and cement (a mixture of chalk and clay).

Natural or Human-Made

Natural Rocks			Human-Made Rocks
Igneous	Sedimentary	Metamorphic	
 Obsidian	 Chalk	 Marble	 Brick
 Granite	 Sandstone	 Quartzite	 Concrete
 Basalt	 Limestone	 Slate	 Coade Stone

What is the main problem in this story so far?



Why can Winter can be a problem?

Day 1 Challenge

$1 \times 3 =$	$2 \times 3 =$	$3 \times 3 =$
$4 \times 3 =$	$5 \times 3 =$	$6 \times 3 =$
$7 \times 3 =$	$8 \times 3 =$	$9 \times 3 =$
$10 \times 3 =$	$11 \times 3 =$	$12 \times 3 =$
$1 \times 4 =$	$2 \times 4 =$	$3 \times 4 =$
$4 \times 4 =$	$5 \times 4 =$	$6 \times 4 =$
$7 \times 4 =$	$8 \times 4 =$	$9 \times 4 =$
$10 \times 4 =$	$11 \times 4 =$	$12 \times 4 =$

My score:

24

Year 3 and 4 Statutory Spellings

accident

accidentally

actual

actually

address

answer

appear

arrive

believe

bicycle