

Year 5 Maths – Spring Term

Parts of a Fraction

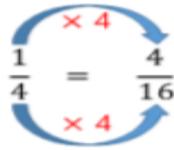
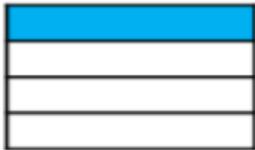
numerator
(number of parts we have)

2

5

denominator
(total parts in whole)

Equivalent Fraction



To find an equivalent fraction, you do the same to the numerator as you do to the denominator.

Adding Fractions with different denominators

$$\begin{aligned} \frac{9}{5} + \frac{14}{7} &= \frac{63}{35} + \frac{70}{35} \\ &= \frac{63 + 70}{35} \\ &= \frac{133}{35} \end{aligned}$$

Vocabulary

Fraction - a numerical amount

Numerator — Number of parts we have in a fraction (Top number)

Denominator — Total parts in whole (bottom number)

Equivalent Fraction — A fraction that names that same number in its simplest form

Multiple - a number that can be divided without remainder

Mixed number - A whole number and a proper fraction

Unit Fraction — The numerator is always one

Non unit Fraction— The numerator is greater than one..

Proper Fraction — A fraction where the numerator is less than the denominator

Improper Fraction— A fraction where the denominator is higher than the numerator

Sequence — Putting numbers into an order

Ascending - Smallest to largest

Descending - Largest to smallest

FRACTIONS

$\frac{1}{5}$

Proper Fraction

The numerator is smaller than the denominator.

$\frac{6}{2}$

ImProper Fraction

The numerator is greater than the denominator.

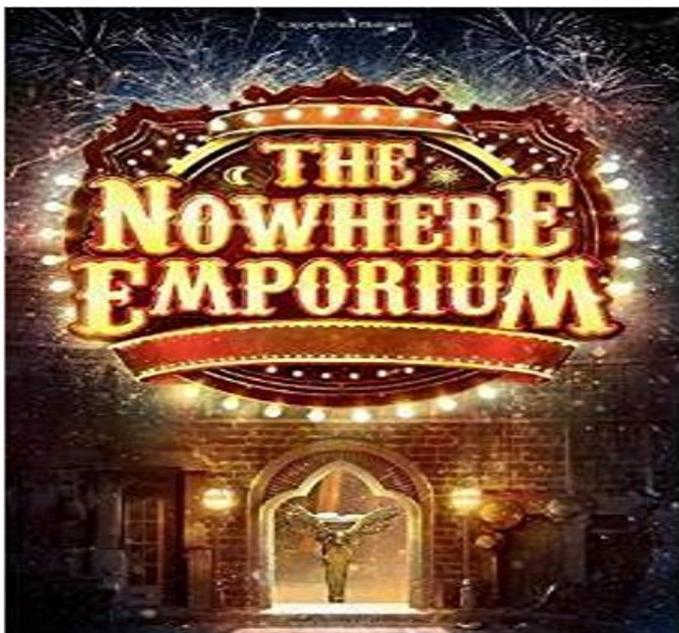
$2\frac{1}{2}$

Mixed fraction

A whole number and a proper fraction together.

Newspaper Article

Year 5 English – Spring Term1



Vocabulary

Fiction— something that is invented or untrue that describes imaginary events and people

Narrative— a spoken or written account of connected events; a story

Paragraphs — a section of a piece of writing, with a single theme that starts with a new line, indentation, or number

Figurative Language— Figures of speech such as metaphors and similes, that go beyond the literal meanings of the words to give readers new insights. On the other hand, alliterations, imageries, or onomatopoeias are figurative devices that appeal to the senses of the readers

Comma — a comma separates the units of meaning in a sentence. For lists, for fronted adverbials and to mark relative clauses

Hyphen— used to join words to show that they have a combined meaning or that they are linked in the grammar of a sentence

Direct Speech— written text that reports speech using inverting commas to mark that speech

Features of a Newspaper Report

- The name of the Newspaper
- A headline that uses a pun, rhyme or alliteration
- A subtitle which gives a bit more information about what the newspaper report is about
- The reporter's name
- An introductory paragraph containing the 5W's (what, where, when, who, why)
- Information in chronological order
- Pictures with captions
- Written in 3rd person
- Written in the past tense
- Direct speech

Newspaper Reports

Name of Newspaper → THE NEWS TODAY

Headline → HOW MUCH IS THAT DOGGY IN THE WINDOW?

Reporter's Name → EXCLUSIVE STORY By Andy Hall

Opening → The star of the comedy movie, it's a dog's life, was found yesterday, pointing out all the windows of the house in Milton...

Article → The dog was found by security guard Peter Paddy yesterday...

Sub-heading → MISSING DOG FOUND

Picture → [Image of a dog]

Caption → Missing dog found in the window of the house in Milton...

Advert → WORKED ABOUT LOSING YOUR PET? For a Black Poodle...

Extra Information → Newspapers may include some or all of these features.



Vocabulary

Materials— a state of matter that is either a solid, liquid or gas

Irreversible — a change that cannot be changed back

Dissolving — when something mixed with a liquid and becomes another solution

Insulator — a thermal insulator stops heat from travelling, an electrical insulator stops electricity to travel

Variable - a thing that is changed

Insoluble - when something is added to a liquid, it stays the same

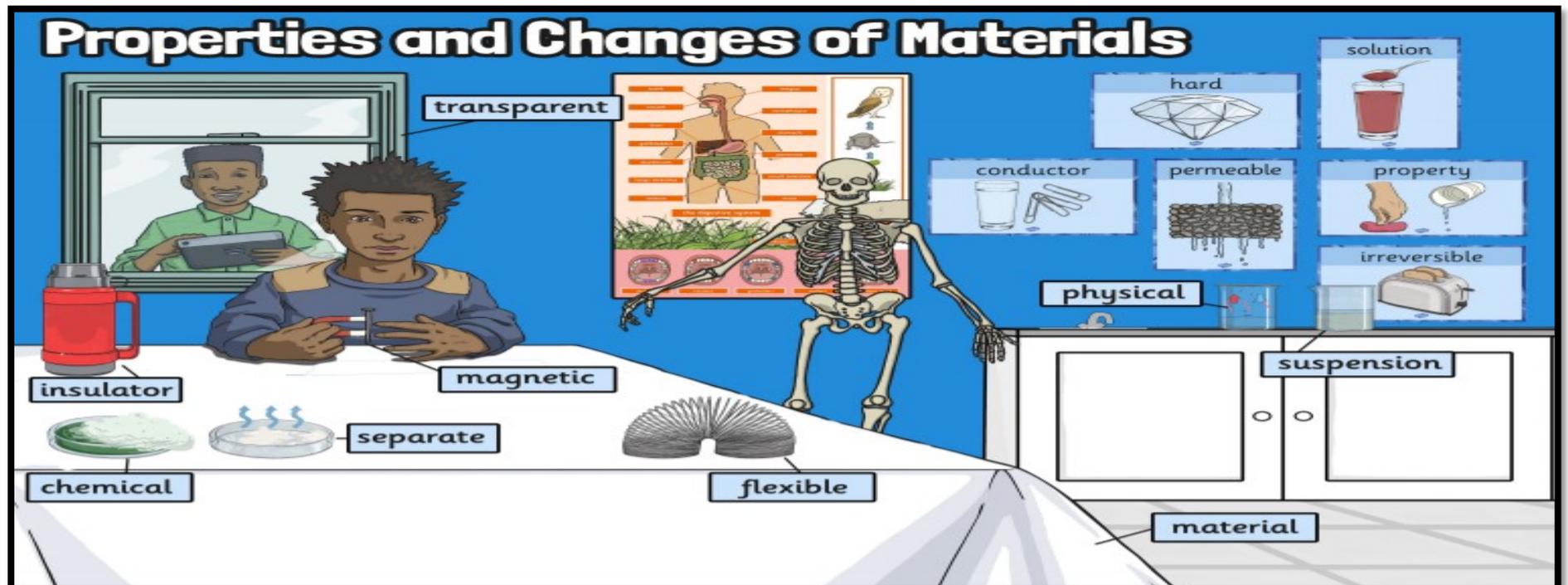
Matter - What makes up a gas, liquid or solid

Properties — anything that can be measured e.g size, mass

Separating - when two separate substances can be taken away from each other

Conductor - a thermal conductor allows heat to travel, an electrical conductor allows electricity to travel

Soluble - when something is added to liquid it disappears



What Is a Mountain?



How would you explain to someone what a mountain is?

When does a hill become a mountain?

A mountain is usually defined as a part of the landscape with steep slopes that rise over 300m.

Some geographers define a mountain as a summit of at least 600m high.

Some mountains are found in groups called ranges, others are isolated summits.



Mountain Ranges

The map shows mountain ranges in Europe. A mountain range is a groups of mountains that are close together.

The largest mountain in Europe is Mount Elbrus. Its summit is 18510.5 feet (5,642 meters) above sea level and it is located in Russia.

The highest mountain in the UK is Ben Nevis which is in Scotland. It's summit is 4412.73

Vocabulary

Mountain — an area of land that is taller than 300 metres

Hill — an elevated area of land than is lower than 300 metres

Mountain Range - A group of mountains positioned close to each other

Sea level — the level of the sea from which we measure the height of land

Contour lines — lines on a map that join land that is the same height above sea level

Maps — an object made by a human being, usually one of cultural or historical interest

Summit —the highest point of a mountain

Ridge—a long, narrow high section of land

Valley — the area of low land between mountain

Plateau — An area of flat, high ground

Tectonic Plates - The Earth's outer layer is made up of large, moving pieces called **plates**

Magma - Hot liquefied rocks below the Earths surface.

Climate - The average weather condition looking at weather patterns from 30 years.

Unit: 5.3 – Spreadsheets

Key Learning

Using the formula wizard to add a formula to a cell to automatically make a calculation in that cell.

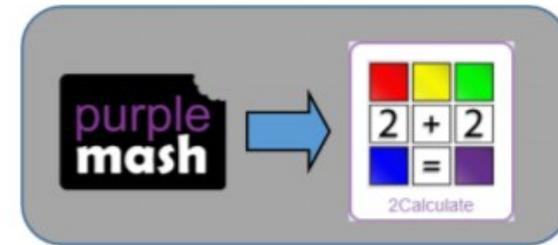
To copy and paste within 2Calculate.

Using 2Calculate tools to test a hypothesis.

To add a formula to a cell to automatically make a calculation in that cell.

Using a spreadsheet to model a real-life situation and answer questions.

Key Resources



Key Vocabulary

Average – Symbols used to represent comparing two values

Advance mode – A mode of 2Calculate in which the cells have references and can include formulae.

Copy and Paste – A way to copy information from the screen into the computer's memory and paste it elsewhere without re-typing.

Columns – Vertical reference points for the cells in a spreadsheet.

Cells – An individual section of a spreadsheet grid. It contains data or calculations.

Charts – Use this button to create a variety of graph types for the data in the spreadsheet.

Equals tool – tests whether the entered calculation in the cells to the left of the tool has the correct answer in the cell to the right of the tool.

Formula – Use the formula wizard or type into the formula bar to create a formula in a cell, this will calculate the value for the cells based upon the value of other cells in the spreadsheet.

Formula Wizard – The wizard guides you in creating a variety of formulae for a cell such as calculations, totals, averages, minimum and maximum for the selected cells.

Move cell tool – This tool makes a cell's contents moveable by drag-and-drop methods.

Random tool – Click to give a random value between 0 and 9 to the cell.

Rows – Vertical reference points for the cells in a spreadsheet.

Spin Tool – Adds or subtracts 1 from the value of the cell to its right.

Spreadsheet – A computer program that represents information in a grid of rows and columns. Any cell in the grid may contain either data or a formula that describes the value to be inserted based on the values in other cells.

Timer – When placed in the spreadsheet, click the timer to adds 1 to the value of the cell to its right every second until it is clicked again.

Key Images

Open the main menu 

Save your work 

Open a previously saved file 

Increase or decrease spreadsheet size 

Advanced mode 

Formula wizard 

Format cell toolbox 

Charts 

Totals toolbox 

Image Tools 

Controls Toolbox 

Random number 

Count 

Equals 

Timer 

To copy  To cut  To paste 

Key Questions

How would you add a formula so that the cell shows the product of two other cells?

Click on the cell where you want the product to be displayed then click the formula wizard button. Click on the cell that contains the first number. Choose the x operation then click on the second number. Click OK.

What would you use in 2Calculate to have a cell that automatically calculates the number of days since a certain date?

You could use formulae and the totalling tools. To make the spreadsheet easier to understand, you could use named variables.

Explain what a spreadsheet model of a real-life situation is and what it can be used for?

It represents the data of a situations for example budgeting for a party, working out how big a field needs to be for a certain number of animals, working out how to spend your pocket money over time. Using the existing data to predict what time your shadow will be a certain length etc.

The Seaside

Year 5 Art—Spring 2

hatching



scumbling



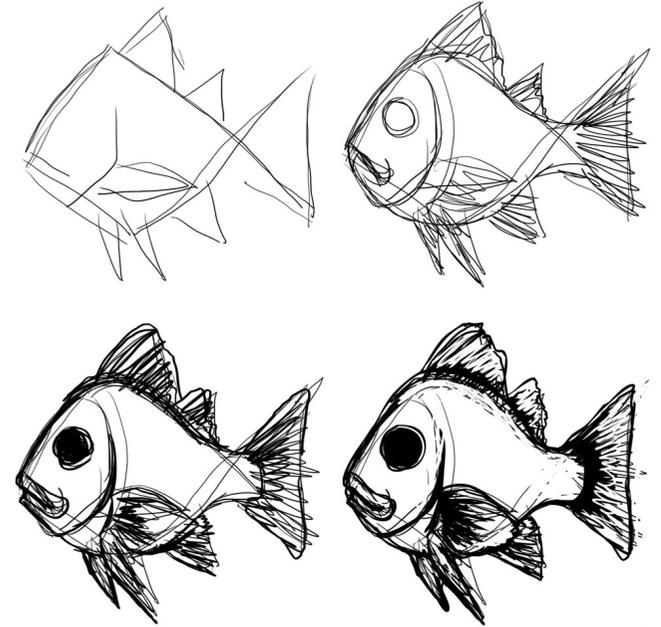
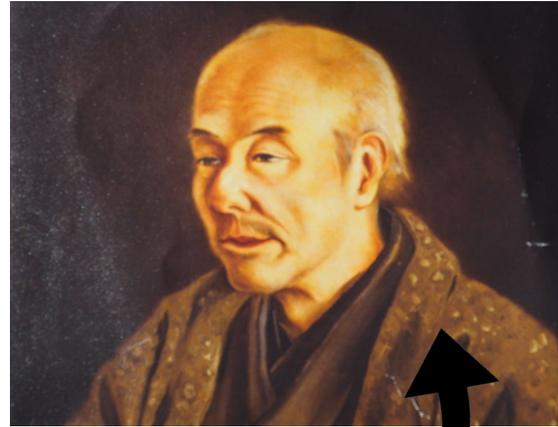
stippling



cross-hatching



blending/smudging



cgattic.ca

Artist Research—Katsushika Hokusai

Hokusai was born on the 23rd day of 9th month of the 10th year of the Hōreki period (October or November 1760) to an artisan family, in the Katsushika district of Edo, Japan. His childhood name was Tokitarō. It is believed his father was the mirror-maker Nakajima Ise, who produced mirrors for the shogun. His father never made Hokusai an heir, so it's possible that his mother was a concubine. Hokusai began painting around the age of six, possibly learning the art from his father, whose work on mirrors also included the painting of designs around the mirrors.



Vocabulary

Pattern— a repeated decorative design

Texture— the feel, appearance, or consistency of a surface or a substance.

Tone— the light and dark values used to render a realistic object, or to create an abstract composition.

Line - the drawing of an any image that only consists of straight lines and curves without any shade or colour

Form - the visible shape

Persuasive Letter



A Non-chronological report on 'Beasts'

Vocabulary

Climate Change - when the Earth's climate changes for a long period of time for 20-30 years to millions of years.

De-forestation - cutting and clearing land of trees without planting new ones.

Persuasive - to get people to change their mind or to agree with your point of view.

Rhetorical Question - a question that does not need an answer. It normally offers an opinion or view point.

Modal verbs - they express a level possibility.

Model subjunctive form - these are verbs that express things that could or should happen.

Features of a non-chronological report

boxes or bullet point lists

- **Topic Title** - covers the whole subject
- **Brief introduction paragraph** gives who/what/ where overview.
- **Information organised into categories**
- **Each category has a sub-heading**
- **Some information may be in fact**
- **Extra details support the main points**
- **Factual language and description**

What is climate change?

Climate change is long-term shifts in Earth's average temperatures. Human actions such as burning fossil fuels (coal, oil and gas), farming and cutting down forests are a major cause of climate change. These activities release certain gases, such as carbon dioxide and methane, into Earth's atmosphere, which absorb the Sun's heat and stop it from escaping into space. Rising temperatures can result in extreme weather, such as droughts, floods and storms. A UN Intergovernmental Panel on Climate Change has said emissions of these gases have to fall by 2050, to stop further damage to the environment. There are some easy things you can do to help. Some good tips are to walk, cycle or take the bus or train instead of using a car, avoid flying and try and use less electricity.

Many young people feel the same way as Thunberg

litfilmfest

Take A Stand Example Letter

Dear BR,

We are the children from Class... at Hummerill Farm School in Coventry. We have been researching the effects of oil exploration on climate change and we are shocked by what we have found. Our class have used research books, infographics and the internet to uncover the truth about climate change, and, consequently, we have a message for you.

Our world is the only one we have. You may see this all your world - one you can take from without giving back. However, it is time to take action, time to prevent further damage to our precious environment, time to make change. Now is the time to reconsider oil exploration, the seabed can be fish and will make them move away from their natural spawning grounds. This could lead to a serious lack of fish in our oceans and have an impact on the amount of food available. Is this the world you want to leave for future generations?

We understand that this is not a simple issue. However, we urge you to make a commitment to finding more green energy solutions. In this way, we can save our world for cleaner and safer future. If you were to consider how big companies such as yours find it, you may be able to change the world for the better.

We look forward to hearing from you about the changes you are willing to make to save our future.

Yours sincerely,
Class...

Shark Fact File

Sharks are a type of fish but instead of having bones, their skeleton is made of cartilage. This is what your ears and the tip of your nose are made from. There are more than 100 different species of sharks, including the great white shark, grey reef shark, hammerhead shark and tiger shark. Scientists believe that sharks have been in our oceans for around 450 million years. Some species of sharks prefer to live alone while others live in groups called a school or shoal.

Where do they live?

Sharks can be found in all of the Earth's five oceans: the Atlantic, Pacific, Indian, Arctic and Southern.

What do they eat?

What a shark eats depends on its species and where it lives. Most sharks are carnivores because they like to eat fish and other sharks. Some larger sharks eat dolphins, sea lions and seals. Smaller sharks eat smaller fish such as clams, crabs and squid.

Some types of shark can be deadly, but only about 12 species have ever attacked humans. In fact, shark attacks are not very common. More people die from bee stings, snake bites and lightning than from shark attacks.

Shark Senses

Sharks have all the senses that humans have: smell, sight, touch, taste and hearing. The strongest in their sense of smell. Sharks can smell a single drop of blood in the water from 400 metres away. They can also hear fish moving from around 100 metres away. Sharks have very good eyesight and they can see in low levels of light.

Amazing Fact!

Most shark species would die if they kept swimming. Water keeps moving over their gills, which keeps them alive.

Did You Know...?

A baby shark is called a pup.

Tutankhamun's Tomb

Who Found His Tomb?

The tomb was found by a group of researchers led by Howard Carter. It was discovered in 1922, which means that all of the treasures and the body inside have been left in very good condition. Carter worked in the Valley of the Kings. A man named Theodore Davis found a cup with Tutankhamun and his wife on it. This was a clue that helped Carter find the tomb.

What They Found Inside

Inside the tomb they found over 3000 treasures meant for Tutankhamun to take with him into the afterlife. Many of the items were made from, or covered in, gold - perfect for a king. The tomb was split into many different rooms. Most of the rooms were for the objects, more than 5000 in total. The burial chamber with the body is the only decorated room in the tomb, which is very unusual for a resting place for a king.

Decorations

Normally, all the walls would be covered or painted, which is how we know that Tutankhamun died very suddenly.

The Curse of the Mummy!

The curse of the mummy started after Tutankhamun's tomb was opened. Humans have been thought to have magical powers and will curse anyone who disturbs them. It was started when Howard Carter, the man who paid for the dig of King Tut's tomb, and soon after Carnarvon, the man who paid for the dig in Cairo went over mysteriously. It was agreed. As soon as he died, the curse was believed to be real. Other stories are that Carter's pet cat was killed by a cobra and Carnarvon's dog died the same night. Some think it was a germ but others say it was magic.



Animals including Humans

Year 5 Science – Spring 2

Knowledge Organiser

| Key Vocabulary | |
|-----------------------------|---|
| fertilisation | The process of the male and female sex cells fusing together. |
| prenatal | The stage of development from the time of fertilisation to the time of birth. |
| gestation | The process or time when prenatal development takes place before birth. |
| reproduce | To produce young. |
| asexual reproduction | A process where one parent produces new life. |
| sexual reproduction | A process where two parents – one male and one female – are required to produce new life. |
| life cycle | The changes a living thing goes through, including reproduction. |

Key Information

This unit focuses on the changes that human beings experience as they develop to old age. It tackles some sensitive subjects including puberty and death.

You will learn about the life cycle of a human being and investigate the development of babies and compare the gestation period of humans and other animals. You will learn about the changes experienced during puberty and why these occur. The final investigation will be about the changes to the body as humans get older, as well as comparing the life expectancy of different animals.

Key Knowledge

fertilisation
The male and female sex cells fuse together.

prenatal
The cells develop and grow into a foetus inside the mother's uterus. After around nine months, the baby is born.

infancy
Rapid growth and development. Children learn to walk and talk.

childhood
Children learn new skills and become more independent.

adolescence
The body starts to change over a few years. The changes occur to enable reproduction during adulthood. Much more independent.

early adulthood
The human body is at its peak of fitness and strength.

middle adulthood
Ability to reproduce decreases. There may be hair loss or hair may turn grey.

late adulthood
Leading a healthy lifestyle can help to slow down the decline in fitness and health which occurs during this stage.

| Key Vocabulary | |
|------------------------|--|
| adolescence | The social and emotional stage of development between childhood and adulthood . |
| puberty | The physical stage of development between childhood and adulthood . |
| menstruation | When the female body discharges the lining of the uterus. This happens approximately once a month. |
| adulthood | The stage of development when a human is fully grown and mature. |
| life expectancy | The length of time, on average, that a particular animal is expected to live. |

Human beings always grow more brain cells than they need. This enables mental development in old age to continue.



Mayflies have the shortest known lifespan of an animal. They only live for 24 hours – that's one day.



Bowhead whales are thought to live for up to 200 years.

The 'Turritopsis Dohrnii' is a type of jellyfish which is immortal! It can transform itself back into a baby during asexual reproduction so technically it never dies.

