

Year 5 Maths – Spring Term

Knowledge Organiser

Parts of a Fraction

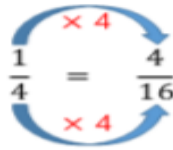
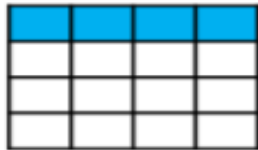
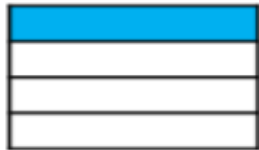
numerator
(number of parts we have)

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.

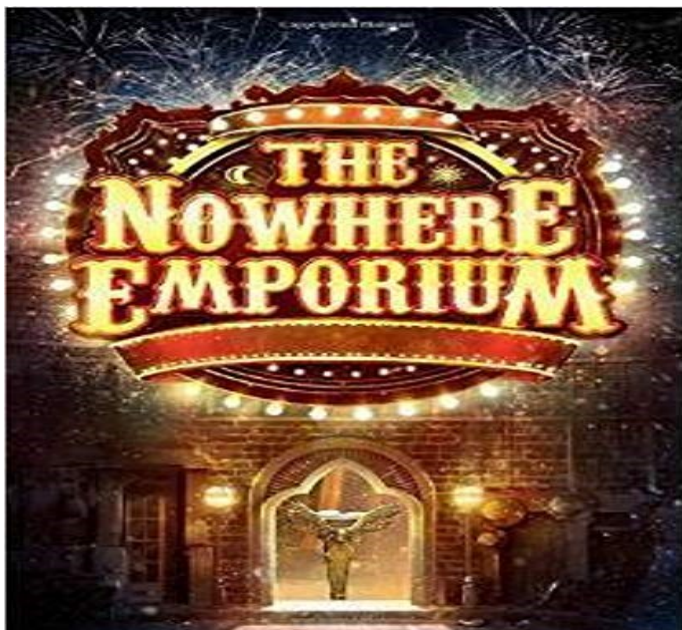
$2\frac{1}{2}$

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 getting out of the window of the house in which, having been missing for two weeks and his owners were worried for his welfare. It is thought that the golden retriever had enough of the building and got sick about the time it was found.

Article → The dog was found by security guard Peter Potts yesterday. He was pointing the doggy in the window when I heard some barking sounds. I went out and found the dog. It was very happy and I took it to the vet. The dog was very healthy and was about 10 months old. It was found in the window of the house in which it was found. The dog was very happy and I took it to the vet. The dog was very healthy and was about 10 months old. It was found in the window of the house in which it was found.

Sub-heading → MISSING DOG FOUND

Picture → A photograph of a golden retriever dog.

Caption → Missing dog found in the window of the house in which it was found.

Advert → A small advertisement for a dog's food.

Extra Information → A small box with additional 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

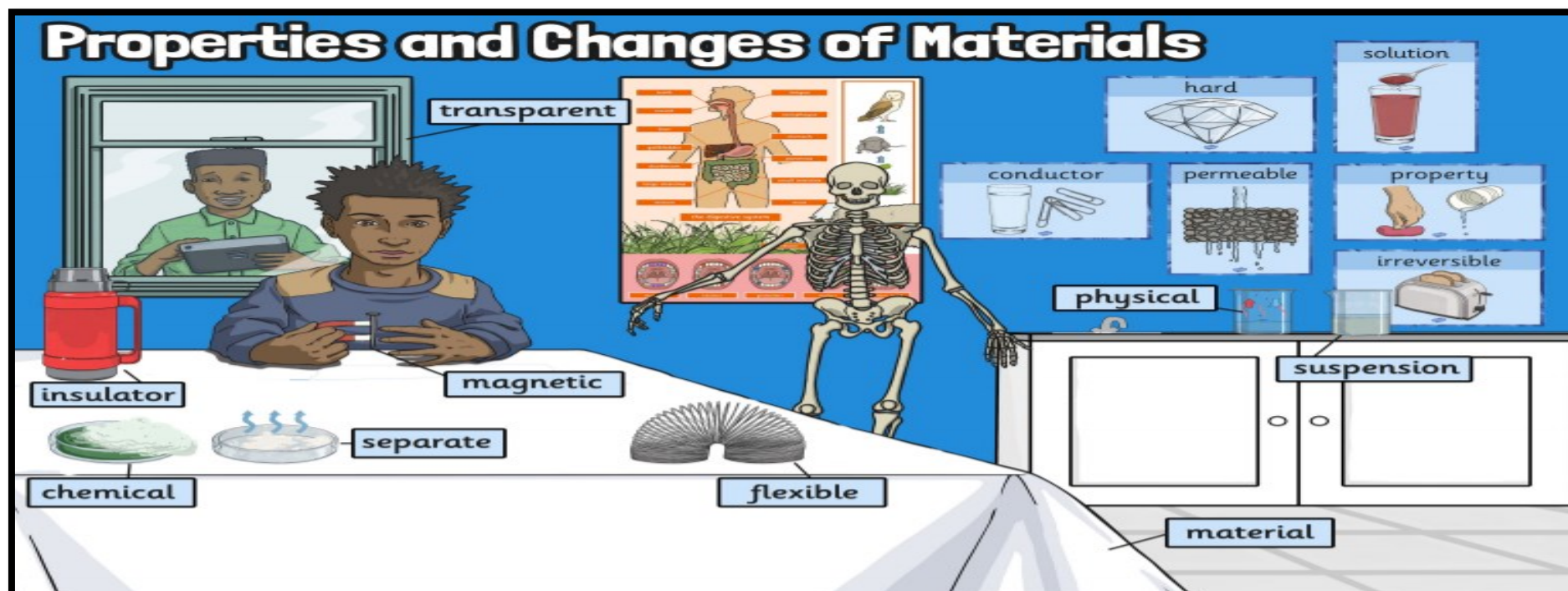
Matter - What makes up a gas, liquid or solid

Properties — anything that can be measures 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.



Vocabulary

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

Hill — an elevated area of land that 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 mountains

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 Earth's surface.

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



Mountain Ranges

The map shows mountain ranges in Europe. A mountain range is a group 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. Its summit is 4412.73

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.

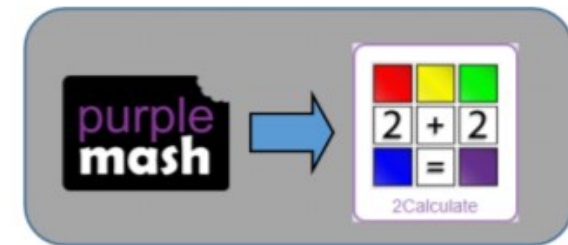
To copy and paste within 2Calculate.

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.

Unit: 5.3 – Spreadsheets

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



Equals



Count



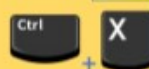
Timer



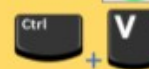
To copy



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.