

Year 3 Mathematics – Autumn 1

Knowledge Organiser

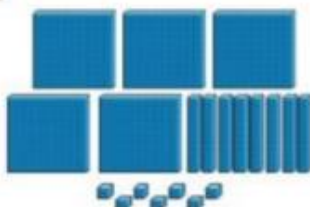


Place Value

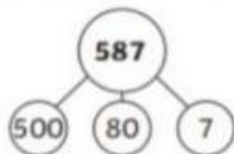
587

five hundred and eighty-seven

Hundreds	Tens	Ones



$$500 + 80 + 7$$



Hundreds	Tens	Ones
100 100 100 100 100	10 10 10 10 10 10 10 10	1 1 1 1 1 1 1

Key Vocabulary

Addition - Calculating the total of two or more objects.

Subtraction - The process of taking one number or amount away from another.

Multiplication - When you take one number and add it together a number of times

Division - When you separate something into parts to be shared

Place Value - The numerical value that has a digit by its position i.e. Hundred, Tens and Ones.

Addition

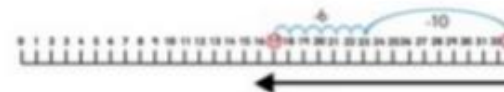


Draw a number line. Start at 23, partition 14 into tens and ones. Do one hop of 10 and then 4 hops of 1 to reach the answer.

1 65 + 72 137	1 1 296 + 46 342
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Subtraction

$$33 - 16 =$$



Multiplication - Counting in 2, 5 & 10

2s - 2, 4, 6, 8, 10, 12, 14, 16, 18, 20



I have noticed that when I count in 2s, all the numbers are even.

5s - 5, 10, 15, 20, 25, 30, 35, 40, 45

I have noticed that when I count in 5s, all the numbers I say end with either a 5 or a 0.



10s - 10, 20, 30, 40, 50, 60, 70, 80



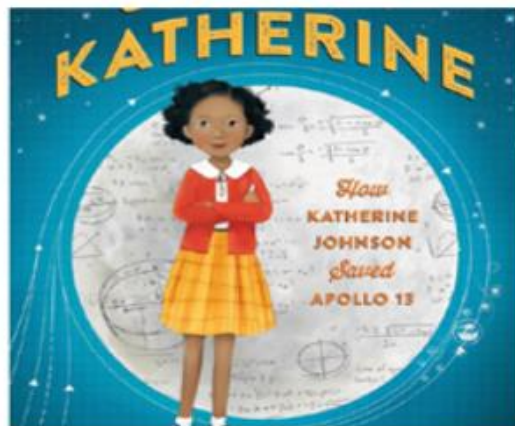
I have noticed that when I count in 10s, all the numbers end in a zero.

Recount: Non-Chronological report

Year 3 English – Autumn 1

Writing Outcome

To write a fact-file about Katherine Johnson, including a short biography



Y3/4 Word List

believe	interest
century	knowledge
consider	learn
different	popular
difficult	possible
earth	question
eight	remember
famous	separate
favourite	special
history	strength
important	woman/women



Pathways to Write keys

Gateway keys (non-negotiables/basic skills)	↳ Mastery keys (year group national curriculum expectations)	Feature keys (vocabulary, manipulating sentences and tense, structure)
<ul style="list-style-type: none"> Combine words to make sentences Join words and clauses using <i>and</i> Sequence sentences to form short narratives Punctuate sentences using a capital letter and a full stop 	<ul style="list-style-type: none"> Use present and past tenses correctly and consistently including the progressive form Use subordination (using <i>when, if, that, or because</i>) and co-ordination (using <i>and, or, but</i>) Use expanded noun phrases to describe and specify Use apostrophes for contracted forms 	<p>Information:</p> <ul style="list-style-type: none"> Use specific vocabulary e.g. <i>Olympic</i>, and some technical vocabulary e.g. <i>medallist</i> Use facts from research Write with clear and precise description Use layout features e.g. questions to draw in the reader, headings and sub-headings, paragraphs to group related ideas, diagrams

Developing Vocabulary

grave—something that is serious

peril—serious and immediate danger.

Astronaut—is a person trained by a human spaceflight program to command, pilot, or serve as a crew member of a spacecraft.

mission—an important task or duty.

project—an individual or collaborative enterprise that is carefully planned to achieve a particular aim.

explosion—a violent expansion or bursting with noise

feat—an achievement that requires great courage, skill, or strength

celebrate—to take part in special enjoyable activities in order to show that a particular occasion is important

research—investigation into and study of materials and sources in order to establish facts and reach new conclusions

mathematician—someone who uses an extensive knowledge of mathematics in their work, typically to solve mathematical problems.

universe—is all of space and time and their contents, including planets, stars, galaxies, and

all other forms of matter and energy.

agency—a business that represents one group of people when dealing with another group

spaceship—a vehicle or machine designed to fly in outer space.

destination—the place to which someone or something is going or being sent.

energy—how things change and move

design—a plan or drawing produced to show how something will look before it is made.

orbit—a regular, repeating path that one object in space takes around another one

flight path—a route followed by airplanes or spacecraft when flying.

fuel - a substance that is used to provide heat or power, usually by being burned.

slingshot—the effect of the gravitational pull of a celestial object in accelerating and changing the course of another object or a spacecraft.

gravity—is the force by which a planet or other body draws objects toward its center.

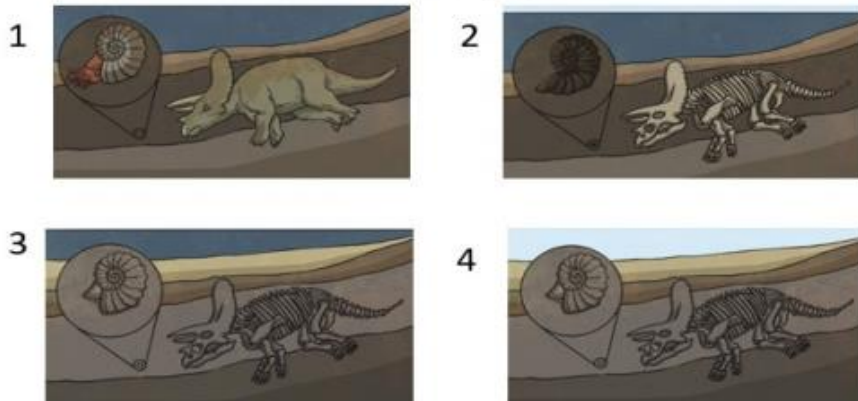
Rocks

Year 3 Science – Autumn 1

Knowledge Organiser

Key vocabulary	
	Definition
Permeable	Allows water to pass through.
Impermeable	Doesn't allow water to pass through
Bones	Hard, white tissue that make up a skeleton.
Fossils	Body fossils are the remains of an animal or plant such as bones, shells or leaves

Fossilisation process



Igneous	Sedimentary	Metamorphic
Formed from magma or lava.	Formed under the sea as a result of sedimentation, compaction and cementation.	Igneous or sedimentary rocks that change chemically due to proximity to magma.

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

Key Vocabulary

linen	A cloth made from a plant called flax, used for making clothes or sheets.
tomb	A large grave which is above ground with a sculpture or decoration on it.
monument	Large structure usually made of stone, which is built to remind people of an event in history.
chisel	A tool which has a long metal blade with a sharp edge at the end. Used for cutting wood or stone.
hieroglyphics	A picture used as a form of writing instead of letters.
official	An important person who holds a position of authority in an organisation.
mummification	The process in which the flesh and skin of a corpse (dead body) can be preserved.
pharaoh	An ancient Egyptian ruler (king or queen).
merchants	A person who buys or sells goods in large quantities.
pyramid	A building with triangular sides built as an Egyptian tomb (a place to bury the dead).
burial chamber	A room that is often below ground level that is used to bury the remains of the dead.
descendants	A person who is related to you and who lives after you, such as your child or grandchild.

Key Dates

3100BC - 30BC	Ancient Egyptian era
2,640 BC	First pyramid is believed to be built.
2,520 BC	The Great Sphinx (body of a lion and head of a human) is believed to be built.
1,332 BC	The 10-year rule of Tutankhamun begins.
51 BC	Queen Cleopatra's reign begins. She is the last Pharaoh of the ancient Egypt period
Nov 1922	Howard Carter discovers the tomb of Tutankhamun in the Valley of the Kings.

ANCIENT EGYPT



Pharaoh



scarab beetle



canopic jars



mummy

coffin



sphinx

pyramid



slave

tomb



soldier

Rameses
Cleopatra



sickle



mattock



plough



Egyptian writing - Hieroglyphics



Year 3 Art—Autumn 1 - Autumn

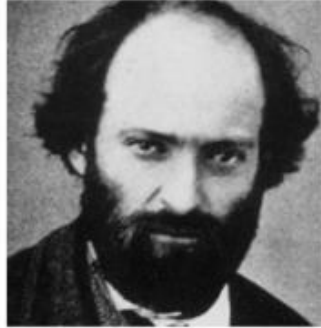
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Artists

Henri Matisse



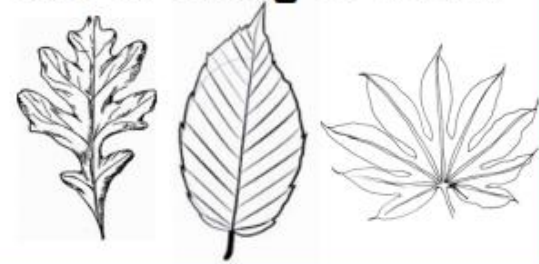
Paul Cezanne



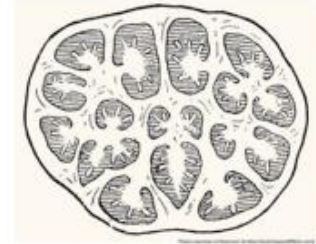
Jackson Pollack



Line drawing of a leaf



Cross-section of a pumpkin



Key vocabulary	Definition
Line	A drawing done using only narrow lines, without blocks of shading.
Pattern	A repeated design that is used to decorate something.
Texture	Texture refers to the way an object feels to the touch or looks as it may feel if it were touched.
Observational drawing	Studying an object carefully and carefully drawing what you see.





PURPLE MASH COMPUTING SCHEME OF WORK - KNOWLEDGE ORGANISER

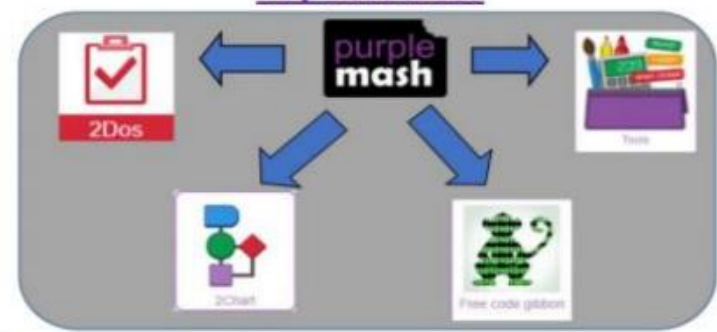
2 simple

Unit: 3.1 – Coding

Key Learning

- To design algorithms using flowcharts.
- To design an algorithm that represents a physical system and code this representation.
- To use selection in coding with the 'if' command.
- To understand and use variables in 2Code.
- To deepen understanding of the different between timers and repeat commands.

Key Resources



Key Vocabulary

- Action** - Types of commands, which are run on an object. They could be used to move an object or change a property.
- Algorithm** - a precise step by step set of instructions used to solve a problem or achieve an objective.
- Bug** - A problem in a computer program that stops it working the way it was designed.
- Code block** - A group of commands that are joined together and are run when a specific condition is met or when an event occurs.
- Code Design** - Design what your program will look like and what it will do.
- Command** - A single instruction in a computer program.
- Control** - These commands determine whether parts of the program will run, how often and sometimes, when.
- Debug/Debugging** - Looking for any problems in the code, fixing and testing them.
- Design Mode** - Used to create the look of a 2Code computer program when it is run.
- Event** - Something that causes a block of code to be run.
- If** - A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.

- Input** - Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
- Output** - Information that comes out of the computer e.g. sound.
- Object** - An element in a computer program that can be changed using actions or properties. In 2Code, buttons, characters and vehicles are types of objects.
- Properties** - All objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.
- Repeat** - This command can be used to make a block of commands run a set number of times or forever.
- Computer simulation** - A program that models a real-life situation.
- Selection** - This is a conditional/decision command. When selection is used, a program will choose a different outcome depending on a condition.
- Timer** - Use this command to run a block of commands after a timed delay or at regular intervals.
- Variable** - A named area in computer memory. A variable has a name and a value. The program can change this variable value.