



Mary was a pioneering palaeontologist

She studied fossils to understand the past



Mary Anning



Mary was born in 1799  
Most people were quite poor.



1799

1800

1837



Victoria became queen in 1837.



1847

Mary was a fossil collector who lived in the coastal town of Lyme Regis.



Mary's father showed her how to get fossils out of rocks and cliffs.



When Mary's father died she sold fossils to visitors.



She discovered the fossil of an ichthyosaur.



Mary discovered the fossil of a plesiosaur.



Henry was Mary's friend and an artist.  
Mary was poor. He sold drawings of her fossils and gave her money.



Mary died in 1847.

Mary helped us to know more about the prehistoric past.



This is her legacy.



Significant people make big differences in their lifetime



David is a scientist who makes films about natural places and wildlife.

David Attenborough



1926

David was born in 1926

Simple cars were being driven.



1952

Elizabeth II became queen in 1952.



1978

David filmed 'Life on Earth' with rare mountain gorillas.



1985

He was knighted by Queen Elizabeth II.  
He is called Sir David Attenborough.

2000  
2001



David made a film about the oceans and seas called Blue Planet in 2001.  
He filmed Blue Planet II in 2017.

2017



2020

He has shown us the wonders of the world.  
He warns us about the dangers of pollution.  
This is his legacy.



## Year 1: Printmaking



### Core content:

Explore the marks that can be made using different printing techniques.

Learn how to make and use a stencil and relief printing block.

### Technical vocabulary:

**Printmaking** – creating artworks by printing.



**Stencil** – a piece of card, plastic or metal, into which shapes have been cut. A picture is created by drawing or painting through the holes.



**Relief printing** – printing from a block that has recessed areas.



**Overprinting** – to print onto a surface that has already been printed on.



**Stroking** – the movement of a brush when painting.



**Stippling** – drawing or painting using small dots.



### Connections:

Karen Lederer (born 1986)  
American printmaker





**Mammals**

**Birds**

**Amphibians**

**Reptiles**

**Fish**

warm-blooded

warm-blooded

cold -blooded

cold-blooded

cold-blooded



skin

feathers

skin

scales

scales



fur or hair

wings

water in and out

eggs

eggs

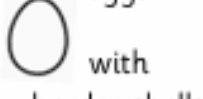
live young

eggs

soft eggs

eggs

soft eggs



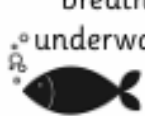
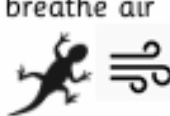
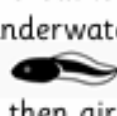
breathe air

breathe air

breathe underwater

breathe air

breathe underwater



human  
cat  
dog  
cow  
whale

robin  
blackbird  
sparrow  
duck

frog  
or toad

snake  
lizard

salmon  
cod  
trout

**carnivore**



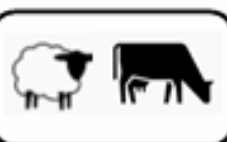
only eats meat



**herbivore**



only eats plants



**omnivore**



eats meat and plants



sight



smell



taste



hear



touch





There are 7 continents

There are 5 oceans

A continent is very large piece of land that covers a big part of the earth

An ocean is an enormous sea

**7**  
continents



1. **Asia**
2. **Africa**
3. **Antarctica**
4. **Australia**
5. **Europe**
6. **North America**
7. **South America**

1. **Atlantic**
2. **Arctic**
3. **Indian**
4. **Pacific**
5. **Southern**

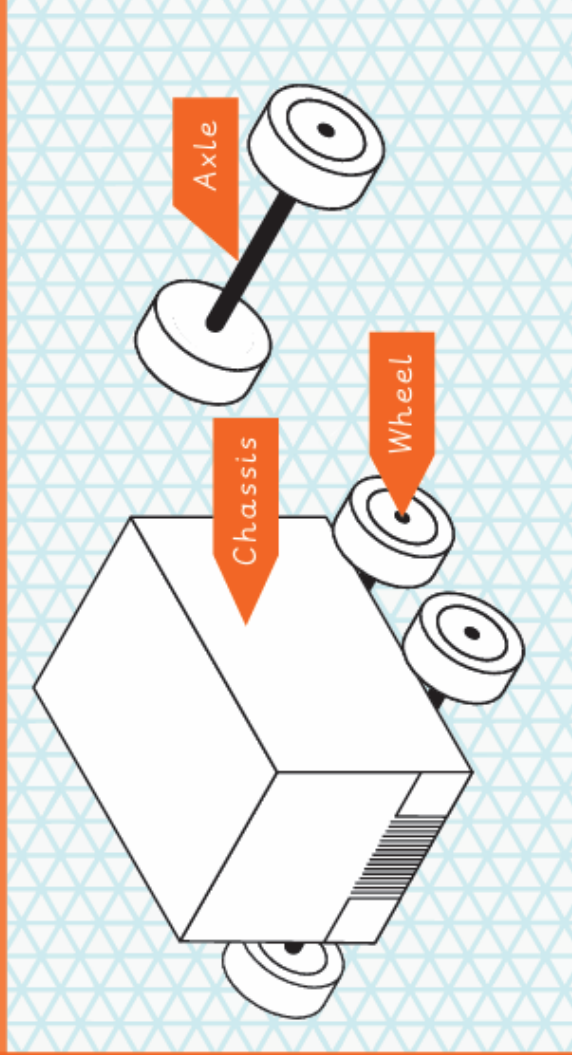
**5**  
oceans



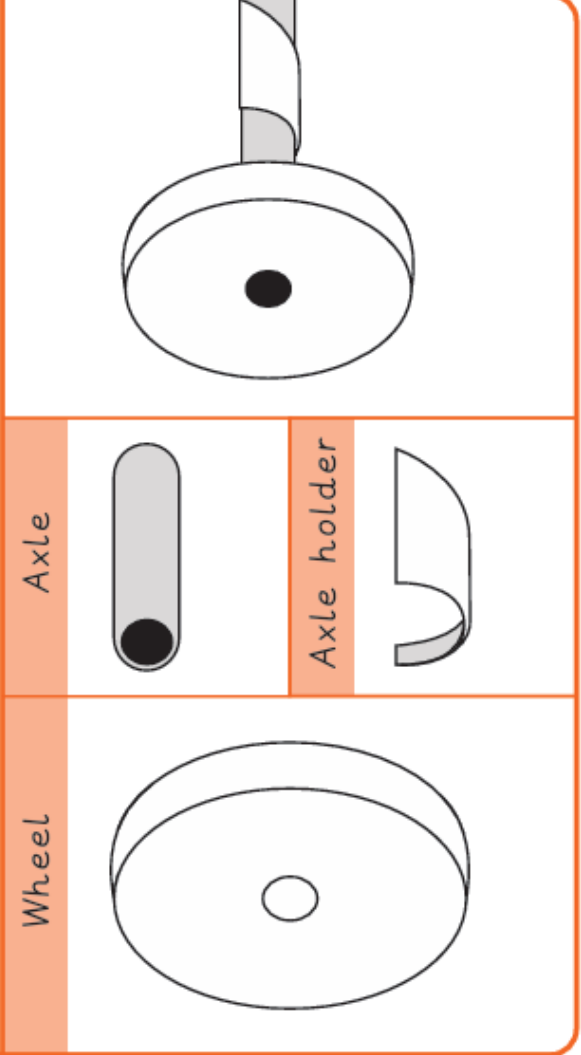
The United Kingdom is in the continent of **Europe**

Key facts

How do wheels move?  
The wheels need to be round and balance the body of the vehicle.



The wheels need to be attached to an axle.  
The axle needs to fit inside the axle holder but must not be attached to the axle holder otherwise the wheels will not turn properly.



Mechanisms - Wheels and axles

Accurate	Neat, correct shape, size and pattern with no mistakes.
Axle	A long straight rod which connects to a rotating part (e.g. the wheels of a car).
Axle holder	The part of a mechanism which holds the axle steady.
Chassis	The body of a car.
Design	To make, draw or write plans for something.
Fix	To mend something so that it will work properly again.
Mechanic	A person who can build or mend vehicles or other machines.
Mechanism	Parts of an object that move together to make something work.
Model	A practise version that lets you test out your idea and see how it will look and work.
Test	To find out whether something works as it should.
Wheel	A circular object that turns round. It can be fixed to a vehicle like a car or bicycle to allow the vehicle to move easily over the ground.

Wheels are on many objects, not just vehicles.  
Have you seen any of these?





## Knowledge Organiser

### Recount from personal experience (Year 1)

#### **Recount orally**

Orally recount a real event that you have experienced.



#### **Time order**

Explain an event in the order that it happened.



#### **Compose orally and write**

Say and rehearse a sentence before recording it.



#### **Re-read for sense**

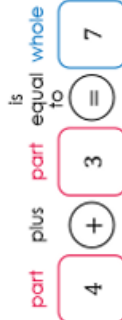
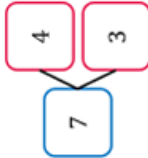
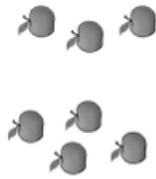
Re-read your sentences to check they make sense.



## Year 1 Unit 2: Addition and subtraction within ten (2 weeks)

### Before you start...

- Complete the Pre-Unit Quiz to assess pupils on the required pre-requisite knowledge and address any gaps.
- Consider how confident pupils are with one to one correspondence.
- Have pupils been exposed to part-whole language? How confident are they in its use?
- How secure are pupils with numbers within ten?



Video: [The part-whole model](#)

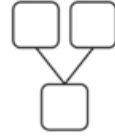
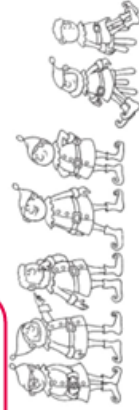
Video: [Count on or count all?](#)

### Understanding addition

- L1: Use the count-all strategy for addition
- L2: Use the count-on strategy for addition
- L3: Link equations to problem solving contexts
- L4: Understand commutativity

Pupils explore two strategies for addition within ten. They begin with 'count all' before moving on to the more efficient 'count on' strategy. The use of part-whole language, represented using the model, is key in developing pupils' understanding of the relationship between numbers, manipulatives and the abstract equation and it is important that this is modelled consistently, encouraging pupils to use the language. In Lesson 3, pupils consider a range of contexts and create problems, connecting this to part-whole models and equations. Number lines, tracks and bead strings support conceptual understanding. In Lesson 4, pupils apply their understanding of part-whole relationships to recognise that addition is commutative: it doesn't matter what order you add the parts in, the whole will be the same.

? How can you ensure that pupils have multiple opportunities to hear and use part-whole language?



$$5 + 2 = \square$$

$$2 + 5 = \square$$

$$7 - 2 = \square$$

$$7 - 5 = \square$$

Although understanding of commutativity (L4), is a Y2 objective on the National Curriculum, it is explored here to support pupils in developing a conceptual understanding of addition and subtraction facts within 10 and to support them in going on to develop number bond fluency.

### The language of subtraction

Pupils have experienced different language for subtraction including 'subtract' and 'take away'. In these lessons, partitioning structures do not involve 'taking away'. This term should only be used when objects are being physically taken away and removed from the situation. In partitioning situations across this unit, consistently use 'subtract'.

Lesson 10 is a suggested consolidation lesson. You may wish to extend Lesson 9 over two lessons, following pupil-generated lines of enquiry, or use the lesson as suits the needs of pupils.

Complete the Post-Unit Quiz to assess pupils on the unit's key learning. Use the results to plan any further consolidation, interventions or Maths Meeting content.

### Exploring the relationship between addition and subtraction

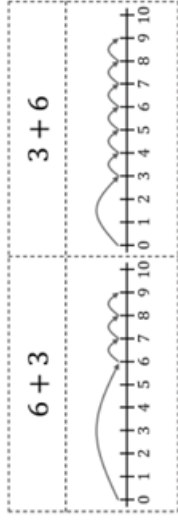
- L8: Recognise the relationship between addition and subtraction
- L9: Explore problems involving addition and subtraction

In the final two lessons of the unit, pupils build on their understanding of addition and subtraction. Using the models explored in earlier lessons, pupils apply their understanding of part-whole relationships to recognise the relationship between addition and subtraction. They write four possible equations for one part-whole model, explaining using the language of part and whole. Lesson 9 provides an opportunity to problem solve using addition and subtraction strategies explored within the unit.

? How will you effectively use part-whole relationships to support pupils in recognising that you can use understanding of addition when working with subtraction?

### 'Part-whole' modelling misconceptions

Taking the example  $3 + 2$ , it can be tempting to start modelling this concretely by placing three cubes in one part, two cubes in the other part as well as placing five cubes in the whole. This means there are physically a total of ten cubes instead of the required five. Therefore, to ensure the modelling reflects the equation, place three cubes in one part and two cubes in the other before combining and moving them to the whole.



### Understanding subtraction

- L5: Subtract using partitioning
- L6: Count back in ones to subtract
- L7: Link equations to problem solving contexts

Pupils build on their understanding of part-whole relationships to subtract using partitioning. The same models and language used in previous lessons are applied to subtraction to support pupils in making connections. In Lesson 6, pupils use representations to subtract by counting back in ones. Lesson 7 returns to the same problem contexts as Lesson 3 with pupils creating and representing their own subtraction problems using these contexts.

? What opportunities will you provide to allow pupils to make connections between different strategies and between addition and subtraction?

There are five large fish and four small fish. Five plus four is equal to nine.

There are nine fish altogether. Five are yellow. Nine subtract five is equal to four. Four are grey.

