

Year 2 Mathematics—Autumn 2

Multiplication & Division

- Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.

Circle the odd numbers.
12 13 17 18 21

$20 = \square \times \square$
What numbers could go in the boxes? Prove it.

- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign.

$5 \times 3 = 15$

Write a division sentence using the same numbers.

Use the number cards to make multiplication and division sentences.
How many numbers up to 20 can you make?

1 2 3 4 5

- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.

I have five 10p coins, exactly enough to buy a chocolate bar. I need 1 more 10p to buy bottle of pop.
How much is a bottle of pop?

$$\begin{aligned} \triangle + \triangle + \triangle &= 12 \\ \hexagon + \hexagon &= 12 \\ \triangle &= \quad \hexagon = \end{aligned}$$

- Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Fill in the gaps:
 $\square \times 3 = 15$
 $3 \times \square = 15$

Circle the incorrect number sentence.
Explain your reasons.
 $4 \times 5 = 20$
 $5 \times 4 = 20$
 $20 \div 5 = 4$
 $5 \div 20 = 4$

Money

- Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value.



- Find different combinations of coins that equal the same amounts of money.



- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

Vocabulary

Multiplication & Division— multiple, multiply, multiple of, groups of, lots of, times, array, rows, columns, repeated addition, divide, divided by, repeated subtraction

Money - pound (£), pence (p), coins, notes, value, equal, amount, change

Graphs—data, information, tally chart, pictogram, block graph, interpret, 'How many more...', 'How many fewer...', table



Year 2 Science – Autumn 2 – Animals Including Humans

Knowledge Organiser

Learning breakdown:

Animal Offspring: Notice that animals, including humans, have offspring which grow into adults. Identifying and classifying.

Life Cycles: Notice that animals, including humans, have offspring which grow into adults. Gathering and recording data to help in answering questions.

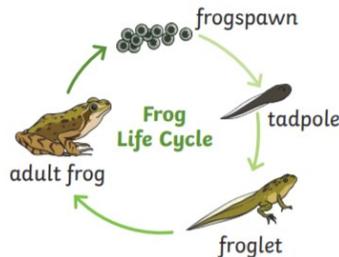
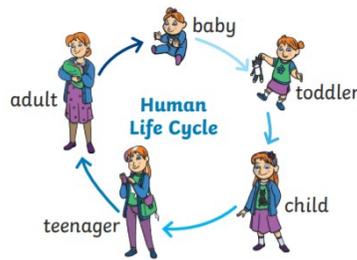
Growing Up: Notice that animals, including humans, have offspring which grow into adults. Asking simple questions. Using their observations and ideas to suggest answers to questions.

Survival: Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). Use their observations and ideas to suggest answers to questions.

Exercise: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. Perform simple tests.

Healthy Living: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. Perform simple tests. Observe closely, using simple equipment.

In this unit, Animals Including Humans, children will begin by looking at animal young and comparing them to their adults. They will look at how animals change as they grow up and be introduced to the life cycles of several varied common animals, including humans. Children are introduced to the three basic needs of animals for survival (water, food and air). The unit ends with children looking at healthy lifestyles, including the importance of exercise, healthy eating and hygiene.

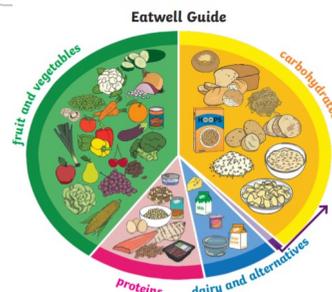


To stay alive, all animals have three basic needs for survival:

air

water

food



Key Vocabulary

adult	A fully grown animal or plant.
develop	To grow bigger and become stronger.
life cycle	The changes living things go through to become an adult.
offspring	The child of an animal.
young	Offspring that has not reached adulthood.
live young	Offspring that has not hatched from an egg.

diet	The food and water that an animal needs.
disease	Illness or sickness.
exercise	A physical activity to keep your body fit.
germs	Tiny living things that can cause disease.
hygiene	How we keep ourselves and the world around us clean so we can stay healthy and stop germs spreading.
nutrition	Food needed to live.
pulse	The beating of the heart that can be felt in your neck and wrist.

Some animals give birth to **live young**.

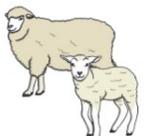


Some animals lay eggs which the **young** hatch from.



Both of these types of **young** then **develop** into **adults**.

Some **offspring** look like their **adult** when they are born.



Some **offspring** do not look like their **adult** when they are born.



Year 2 Geography –Autumn 2–Magical Mapping

Knowledge Organiser

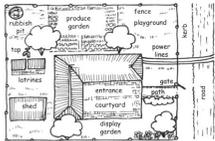
Our local area

Devise simple maps and use and use basic symbols in a key.



Use aerial photographs to recognise landmarks and basic human physical features.

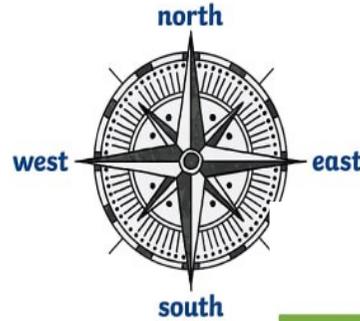
Use simple fieldwork and observational skills to study the geography of our school and its grounds.



Draw a simple sketch map of the school and local area.

Compass Points

Use compass directions and language to describe position and movement.



Map Symbols



Vocabulary

globe	A representation of the earth used to locate places.	
map	A picture of a particular area of the earth drawn to scale on a flat surface.	
Compass	A piece of equipment that shows the direction of north.	
atlas	A book of maps and charts.	
community	An area where a group of people live.	
Directions	Information on which way to go	
town	An area with streets, houses, and buildings that is larger than a village but usually smaller than a city.	
landmark	An object or feature of a landscape that is easily recognizable.	
continent	An area of the world which often contains many countries.	
ocean	A very large area of sea.	
Human/physical features	The difference between man made features of the world and naturally occurring features.	

UK & the world

To use atlases and globes to identify the UK and its countries



To use basic geographical vocabulary to refer to key human and physical features



Use an atlas to locate the seven continents of the world.

Use an atlas to locate the five major oceans of the world.



Year 2 D and T –Autumn 2

Knowledge Organiser

Lesson content.

Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Select from and use a range of tools and equipment to perform practical tasks.

select from and use a wide range of materials and components according to their characteristics

Evaluate and explore a range of existing products

Evaluate their ideas and products against design criteria Technical knowledge.

Learnng breakdown:

Evaluate: Explore and evaluate a range of existing products in the context of evaluating bunting designs.

Design: Generate, develop, model and communicate ideas through talking, drawing, templates, mock-ups in the context of using a basic graphics program to design a bunting flag.

Select: Select from and use a range of tools and equipment to perform practical tasks .I can choose and use a paper template to help cut out a fabric shape and select materials to decorate and join the fabric.

Finally : Evaluate their ideas and products against a Simple design criteria.

Fabric Bunting

In **design** and technology (DT) lessons in **KS1**, children explore the following skills: Evaluating current products and thinking about how they want to produce their own product.

Designing purposeful products for themselves, based on particular criteria. ... Evaluating their finished product against the **design** criteria.

Vocabulary

design	To plan and produce
explore	To look at and find out about
materials	Things needed to make it.
range	The different choices available
equipment	the necessary items for a particular purpose.
product	The item you are making
evaluate	Explain if it is fit for its purpose.
template	A pattern of what you are going to make.
practical	To actually make it.
criteria	The standard by which something may be judged or decided.
bunting	Flags and other colourful festive decorations.

