St Mary's C.E. Primary School

Every Child Flourishing...

# Science Learning Journey

**'I am among those who think that science has great beauty.'**

**Marie Curie**

## Year 6

**Electricity**
- How does the number of bulbs in a circuit affect their brightness?
- How are circuits represented in instructions?
- How can circuits be changed?
- How does the voltage in a circuit affect the brightness of a bulb?

**Animals, including Humans**
- Are drugs bad for us?
- What is in our blood?
- What is the circulatory system?
- Hoe do our lifestyle choices affect how our body works?
- How does exercise affect our bodies?
- What do all the parts of the circulatory system do?

**Evolution and Adaptation**
- Who was Charles Darwin and what did he do?
- What do offspring inherit from their parents?
- What are Micro-organ
- What is evolution, how does it happen and how do scientists know?
- What is the process of evolution?

**Living Things and their Habitats**
- Who was Carl Linnaeas and what did he do?
- How are animals classified?
- In what ways can we sort living things?
- How are living things classified?

**Light**
- How are rainbows created?
- How do we see colour?
- How do our eyes work?
- What colour is white light?
- How do periscopes work?
- How do we see things the way they are?

## Year 5

**Animals, including Humans**
- Do all plants and animals reproduce in the same way?
- What happens in the different stages of pregnancy?
- What happens to us as we get old?
- What is the lifecycle of a insect?
- What is the lifecycle of bird?
- Does the size of an animal affect its gestation period?
- What happens to our bodies during puberty?
- How do we change as we grow older?

**Living Things & their Habitats**
- What is the lifecycle of a mammal?
- What is the lifecycle of amphibian?
- How do flowers reproduce?
- What is the function of the different parts of a flower?

**Properties & Changes in Materials**
- How can we change materials?
- Can all materials be separated?
- What materials are good thermal conductors?
- What materials dissolve in water?

**Forces**
- How and why do objects move?
- How are forces used in everyday objects?
- What is air resistance and how does it work?
- What is water resistance and how does it work?
- What is gravity?

**Earth & Space**
- What is in our solar system?
- Who is Mae Jemison and what has she done?
- What are the phase of the moon?
- What is the solar system?
- How does the movement of the Earth affect our lives?
- What is the universe and what is found in it?

## Year 4

**Electricity**
- How can we make different sounds?
- What is electricity?
- What do we need to make a circuit?
- How does electricity flow?
- What can we do with electricity?

**Living Things and their Habitats**
- How can living things be grouped?
- Where do invertebrates live?
- Who is David Attenborough and what has he done?
- What are invertebrates & vertebrates?
- How do habitats change throughout the year?
- How are living things grouped?

**Sound**
- Who was Ludwig Van Beethoven and what did he do?
- How fast does sound travel?
- How does sound travel?
- How do we hear sounds?
- How does the speed of vibrations affect the pitch of the sound produced?

**States of Matter**
- What is the water cycle?
- How are solids, liquids and gasses different?
- How does water exist in all three states of matter?
- Do all solids have the same melting point?

**Animals, including Humans**
- Where is an animal's place in the food chain?
- What is the digestive system?
- What do out bodies do with the food we eat?
- What happens to our teeth when we eat different foods?

**Animals, including Humans**
- Why is it important that animals, including humans, get the right types and amounts of nutrients?
- What happens to muscles when we move?
- What are the different parts of a skeleton and their function?
- What foods have the best nutritional value?

## Year 3

**Forces & Magnets**
- What is a force and what do they do?
- Does the sizes of a magnet affect its strength?
- Do forces need contact to act on an object?
- How are shadows formed?
- How are shadows created?
- How do forces work?
- Do all magnets attract?
- How do forces impact on daily lives?

**Plants**
- What do each of the different parts of the plant?
- How does pollination happen?
- What conditions are required by plants to germinate and grow?
- What does the function of a stem in a plant growth and survival?
- How are seeds dispersed?
- How do plants grow?

**Light**
- What materials are reflective?
- What is light?
- How do we see objects?
- Who was Thomas Edison what did he do?
- Does light travel around corners?

**Rocks**
- How are soils formed and why are they important to us?
- How are fossils formed?
- How can rocks be classified?
- How are soils formed and why are they important to us?
- Who was Mary Anning and what did she do?
- What are the different types of rocks?

**Everyday Materials**
- Who was John McAdam and what did he do?
- What are the different uses of materials?
- What are the useful properties of materials?
- How do we choose the best material for a job?
- How can some materials be changed?

## Year 2

**Plants**
- What are the different parts of a plant?
- How does a plant grow from a seed?
- Why do plants have so many different parts and what are their function?
- How do deciduous and evergreen trees change throughout the year?
- How do we know what type of tree we can see?
- How do we know what type of plant we can see?

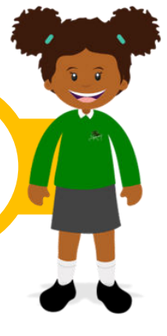
**Living Things & their Habitats**
- Living, dead or never alive - how can you tell?
- How are plants adapted to their environment?
- Why do different animals live in different places?
- How are animals adapted to their environment?
- What do animals eat?

**Plants**
- What do plants need to stay alive?
- What is the lifecycle of a plant?
- How do plants grow?
- When do plants grow best?

**Animals, including Humans**
- What foods do I need to eat to be healthy?
- How and what do plants need to grow?
- What happens to my body when I exercise?
- What do I need to grow and stay healthy?
- Who was George Washington Carver and
- What do animals look like when they are first born?

## Year 1

**Animals, including Humans**
- Are humans different to other animals?
- Are all humans the same?
- Who is Jane Goodall and what has she done?
- What are the five senses and what do they do?
- What are the different parts of my body called?
- Which animals are carnivores, herbivores & omnivores?

**Everyday Materials**
- What are the different types of animals?
- Who was Zaha Hadid and what did she do?
- What different materials are there around us?
- What are the things that I use made from?
- Why are materials chosen for certain jobs?
- How can we describe a material?

**Seasonal Change**
- What do we know about the weather?
- How many birds and animals can I see in Summer?
- How many birds and animals can I see in Winter?
- How does the weather change throughout the year?
- How much does it rain in Spring?
- What is the weather like in Autumn compared to the rest of the year?