

# SCIENCE AT MAGDALEN GATES



## BIG IDEAS

- Learners are engaged in fun, hands-on practical activities.
- Learners are curious and motivated to ask questions about how or why something is happening.
- Learners are excited about telling someone about something new they have learnt.
- Learners are independently thinking, gaining knowledge and making connections about how things work in the world around them.
- Learners have the right equipment to use and support their learning.



## PROGRESS

- Units of work have been planned so that prior knowledge and skills are built upon from previous year groups and units.
- Concept map: before and after to visually show learners' increase in understanding of concepts and links.
- Learners are given verbal feedback during lessons to help them to make progress.
- Floor Books and Tapestry evidence pupils progression of working scientifically skills.
- End of unit summative assessment.



## OUR SCIENCE CURRICULUM AND LINKS

- **Animals, including Humans:** **Y1** How are animals different? How should we care for different animals, including our pets? **Y2** How do living things change?  
• How do living things survive? **Y3** Why should I eat different foods? How do I move?  
• **Y4** How does the human digestive system function? What is a food chain, and how does one work? **Y5** Why do humans have to change during their lives? **Y6** What is our cardiovascular system? How can we take care of our bodies? What is evolution and inheritance?
- **Plants:** **Y1** How can we identify wild, and garden plants? **Y2** How can plants help us protect the environment? **Y3** How do plants thrive?
- **Living things and their habitats:** **Y3** Why do animals live in different habitats?  
• **Y4** How can I identify, group, and name a variety of living things? **Y5** How do animals and plants reproduce? **Y6** What is classification?
- **Chemistry:** **Y1** How are materials different? **Y2** Why do we use different materials for different things? **Y3** Why are rocks important to us? **Y4** Can I compare and group materials? Can I investigate how matter changes state? **Y5** Why are the properties of materials important? How does changing a material affect its properties?
- **Physics:** **Y1** Why do we have seasons, and how are they different? **Y3** Why do magnets work? How does a shadow change? **Y4** What is sound, and how does it travel? Can I construct a simple circuit and investigate how electricity is conducted?  
• **Y5** Why is there day and night? **Y6** What is reflecting and what is refracting?



## WORKING SCIENTIFICALLY

Our Working Scientifically skills are presented to learners in age appropriate language to give them ownership of the development of these skills.

Like our Science Curriculum, skills are built upon from previous year groups.

Working Scientifically skills are grouped to take learners through the process of investigations: Plan, Do, Record, Review.

A Magdalen Gates scientist is able to question, challenge and explore the world they live in. We endeavour to provide our pupils with opportunities to develop their skills in becoming confident scientists: always asking questions, observing and challenging; using scientific vocabulary to explain their thinking and findings; recording and presenting using varied methods.

Our pupils will make connections between areas in our Science curriculum and the world they live in today.