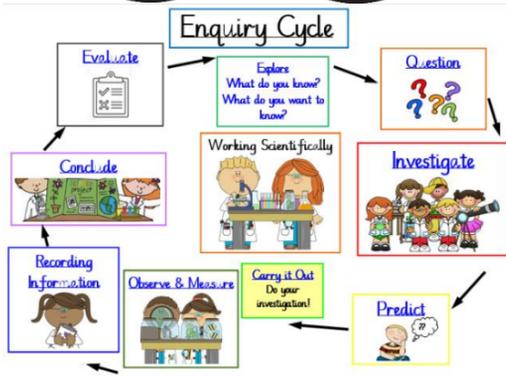




# Science in Sledmere LEARNING JOURNEY



Pupils leave for Highschool with a secure knowledge in science

**Maafa**  
**Animals including humans**  
E- Same as Y5  
K- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies functions, identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.

## YEAR 6

**Frozen Kingdoms**  
**Habitats**  
Investigations- Investigating icebergs  
Describe how living things are classified into groups due to their characteristics, including micro-organisms, plants and animals, give reasons for classifying plants and animals, identify how animals and plants are adapted to their environment in different ways  
**Electricity**  
K- Compare and give reasons for variations in how components function, including brightness of bulbs, loudness of buzzers, associate the brightness with the number of cells.

**Britain at War**  
**Light**  
Investigation- Periscope, shadows.  
K- Use the ideas that light travels in straight lines, explain how light sources travel to our eyes and reflect off objects, explain shadows.  
**Evolution and Inheritance**  
Recognise that living things have changed over time and that fossils provide information, recognize that living things produce offspring of the same kind, but are not identical, identify how animals and plants are adapted to suit their environment and how this relates to evolution.

## Highschool

**Dynamic Dynasties**  
**Earth and Space**  
K- Describe the movement of the earth and other planets relative to the Sun in the solar system, describe the movement of the moon relative to the Earth, use the idea of Earth's rotation to explain night and day, describe them as spherical bodies.

**Groundbreaking Greeks**  
**Properties and changes of materials**  
E- Plan different types of scientific enquiries to answer questions, use test results to make predictions, report and present findings, identify scientific evidence to support ideas, record data and results of increasing complexity using scientific diagrams and labels, take measurements.  
K- Compare and group together everyday materials- hardness, solubility, transparency, conductivity and response to magnets, Know that some materials will dissolve, give reasons for uses of materials, use knowledge to decide how to separate materials

**Sow, Grow and Farm**  
**Plants**  
Investigation- Dissecting a flower, growing beans and recording data.  
K- Habitat changes effect on food chains, a life cycle for living things, plant life cycles,

## YEAR 5

**Rocks, Relics and Rumbles**  
**Rocks**  
K- Compare and group together different kinds of rocks, different types of rocks and how they are formed.  
**Forces and magnets**  
E- Set up simple practical enquiries, comparative and fair tests, report on findings using a range of formats, use results to draw on simple conclusions and make predictions, use scientific evidence to support their findings.  
K- Compare how things move on different surfaces, describe magnets having two poles and how they interact

**Through the Ages**  
**Animals, including humans**  
Investigations- What are our joints for?, What do owls eat? How do worms move?  
K- Identify that animals need the right types and amount of nutrition, understand that humans and other animals have skeletons and muscles for support, protection and movement

**Emperors and Empires**  
**Plants**  
Explore the part flowers play in the lifecycle of flowering plants, including pollination, seed formation and seed dispersal, investigate the way in which water is transported, describe the functions of parts of flowering plants, MRS GREN.  
**Light**  
K- Recognise that light from the sun can be dangerous, notice that light is reflected from surfaces, find patters in shadows.

**Misty Mountains, Winding River**  
Investigation- The water cycle and our changing environment (habitats).  
**States of matter**  
E- (same as Y3)  
K- Compare and group materials together, according to whether they are solids, liquids or gases, observe that some materials change state when they are heated or cooled.

**Ancient Civilizations**  
**Electricity**  
K- Identify common appliances, recognize conductors and insulators, identify whether a lamp will light in a series circuit, conduct simple tests.

**Invasion**  
**Animals including Humans**  
K- Describe simple functions of the digestive system, identify types of teeth, discuss diet, food chains.

## YEAR 4

**Magnificent Monarchs**  
**Forces**  
Push and Pull

**Movers and Shakers**  
**Living things and their habitats**  
Investigations- Do snails have noses?, What is the lifecycle of a ladybird, where do snails live?  
K- Describe food chains, differences between things that are living and dead, identify and name a variety of plants and animals, including micro-habitats, describe differences in habitats  
**Humans**  
Investigation- Germs spreading through direct and indirect contact, why should I exercise?  
K- Describe what a human needs to survive, the importance of exercise, notice that animals have offspring that grow.

**Coastline**  
**Plants**  
K- Identify and name a variety of plants, animals in their habitats, including microhabitats, find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

**Coastline**  
**Everyday Materials**  
E- Perform simple tests, use their observations to answer questions, gather and record data, observe closely, identify and classify, ask simple questions.  
K- Identify and compare suitability of a variety of everyday materials, find out how the shapes of solid objects made from some materials can be altered.  
-Investigation: Sinking and floating, Will it degrade?.

## YEAR 3

**Bright Light, Big City**  
**-Seasonal sorting**  
E- identify and classify  
K- Objects, materials and living things can be looked at and compared.  
**-Seasonal changes**  
E- Perform simple tests, use their observations to suggest answers, gather and record ideas, ask simple questions and recognize that they can be answered in different ways

**Childhood**  
**-Everyday materials**  
K- Distinguish between an object and material from which it is made, identify and name a variety of everyday materials (including wood, plastic, glass, metal, water and rock), describe simple physical properties.

**Childhood**  
**-Humans**  
K- Identify, name, compare and describe a variety of common animals including fish, amphibians, reptiles, birds and mammals.

**School Days**  
**-Plants**  
K- Identify and name a variety of common wild and garden plants, describe the basic structure of common flowering plants

## YEAR 2

**Big Wide World**  
Animals around the world, world climate, recycling.  
Investigations: floating and sinking, hydration, Is it waterproof?

**Sunshine and Sunflowers**  
-Growing, seasons, light.

**Starry Night**  
-Comparing day and night, Day and night walk, Planets and Stars, Nocturnal animals, shadows and reflections binoculars and telescopes.

**Me and My Community**  
-Woodland walk, exploring leaves, discuss who lives in the woods.  
-Investigations: Autumn fruits, Apples, How does it grow?, Leaf skeletons, Does it float?

**School Days**  
**-Animals**  
K- Identify and name a variety of animals that are herbivores, carnivores and omnivores, Identify, name, compare and describe a variety of common animals including fish, amphibians, reptiles, birds and mammals.

## YEAR 1

**Let's Explore**  
-Changes, holes and tunnels, torches, marvelous machines.

**Dangerous Dinosaurs**  
-Prehistoric safari with fossils, shadows and dinosaur island.

**Once Upon a Time**  
-Festive lights, Is it Shiny?  
Investigations: Building Materials, Magic Apples

## EYFS

# welcome

Understanding the world, providing enriching experiences to introduce vocabulary. NC