

# Stedham Road Map to Success

**Science**  
Hedgehogs Class

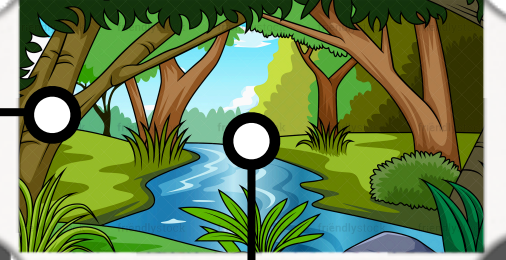
Rocks
Plants
Animals, including Humans
Living things & their habitats
Forces and Magnets
Light
States of Matter
Sound
Electricity

**Where will your imagination take you?**

recognise that they need light in order to see things  
recognise that dark is the absence of light  
notice that light is reflected from surfaces  
recognise that shadows are formed when the light from a light source is blocked by a solid object  
find patterns in the way that the size of shadows change  
explain the difference between transparent, translucent and opaque?

recognise that living things can be grouped in a variety of ways  
classify and identify into broad groups  
explore and use a classification key to group, identify and name a variety of living things (plants, vertebrates, invertebrates)  
recognise that environments can change and this can sometimes pose a danger to living things  
explain how environmental changes have an impact on living things

**Can you survive in the wild?**



identify, construct and interpret a variety of food chains, identifying producers, predators and prey

**What's left to Explore?**

identify and describe the functions of different parts of flowering plants  
explore the requirement of plants for life and growth (air, light, water, nutrients from soil, and room to grow)  
investigate the way in which water is transported within plants  
explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal?

**What do you bring to a friendship?**

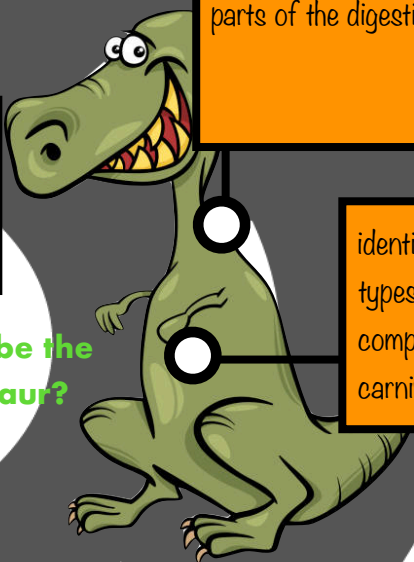


explain the importance of a nutritionally balanced diet  
describe how nutrients, water and oxygen are transported within animals and humans  
identify that animals, including humans, cannot make their own food: they get nutrition from what they eat  
describe and explain the skeletal system of a human  
describe and explain the muscular system of a human  
identify, name and describe the functions of the basic parts of the digestive system in humans?

associate some sounds with something vibrating  
compare sources of sound and explain how the sounds differ  
explain how to change a sound  
recognise how vibrations from sound travel through a medium to an ear  
describe the relationship between the pitch of the sound and the features of its source/object that produces it

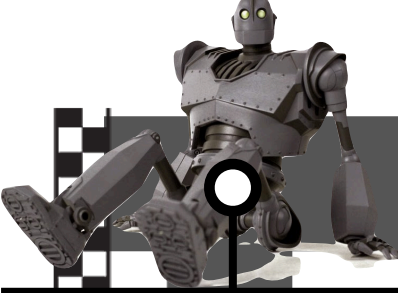
name the trunk, branches and root of a tree  
observe and describe how seeds and bulbs grow into mature plants

**What will be the next dinosaur?**



identify the simple function of different types of teeth in humans  
compare the teeth of herbivores and carnivores

**Is conflict necessary?**



compare how things move on different surfaces  
observe that magnetic forces can be transmitted without direct contact  
observe how some magnets attract or repel each other (two poles- N & S)  
Know everyday materials are attracted to magnets and which are not?

**What comes with great power?**



compare and group materials together, according to whether they are solids, liquids or gases  
explain what happens to materials when they are heated or cooled  
measure or research the temperature at which different materials change state in degrees Celsius  
describe how materials change state at different temperatures use measurements to explain changes to the state of water  
explain everyday phenomena including the water cycle

identify common appliances that run on electricity  
construct a simple series electric circuit  
identify and name the basic part in a series circuit, including cells, wires, bulbs, switches and buzzers  
recognise symbols to represent simple series circuit diagrams  
identify whether or not a lamp will light in a simple series circuit  
Identify common conductors and insulators



**Does the past still matter?**

compare and group together different rocks on the basis of their appearance and simple physical properties  
describe and explain how different rocks can be useful to us  
describe in simple terms how fossils are formed when things that have lived are trapped within rock  
describe and explain the differences between sedimentary and igneous rocks, considering the way they are formed?