

Year 3 – Use the Forces (2 half terms) ENERGY SCIENCE AUTUMN 1 & 2

Prior Learning: Children know that different materials have different properties.

Concept: Energy

In this term, we will be investigating different forces including magnetic force.



Working scientifically:



Plan and set up an enquiry



Take measurements



Present results



Draw conclusions (KS2) explain the results using knowledge

4. TWAL to observe how magnets attract and repel each other

We will observe how magnets react with each other and explore how they behave. Can you get the car to move without touching it?



Opposite poles attract, same poles repel.



1. TWAL compare how things move on different surfaces

We will learn about some different forces including push, pull and friction and discover what happens when forces are balanced and unbalanced. We then plan and set up an enquiry to help the Southampton Dockyard send cars down a ramp safely.



Plan and set up an enquiry



Take measurements

5. TWAL to describe Magnets as having two poles and predict if magnets will attract or repel each other

Today we will learn that magnets have different poles. We will set up an experiment, predict and present our results in groups in a labelled diagram.



2. TWAL to investigate difference between some forces and magnetic force

We will compare magnetic force with other contact forces. We will use magnets and explore the distance needed for magnetic force to work.



Magnetic force does not need contact between two objects (can act at a distance).



6. TWAL to compare magnets with different strengths

We will explore the strengths of different magnets and find a fair way to compare them. Plan and set up your own experiment then make a conclusion from your results.



3. TWAL observe that magnets attract some materials and identify magnetic objects (compare and group materials)

We will set up an enquiry and make verbal conclusions about which materials are magnetic and which are not and present this in a table.



Draw conclusions (KS2) explain the results using knowledge



Present results

Words we will know!

