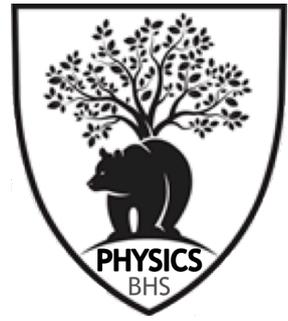


S2 Physics

Transport and Forces



Success criteria

Speed

- I can state the symbols for:
 - Speed
 - Distance
 - Time
 - I can state the units for:
 - Speed
 - Distance
 - Time
 - I can describe what speed is
 - I can state the speed equation
 - I can apply the speed equation to problem solving questions.
 - I can describe 2 method to measure average speed
 - I can state 1 pro with measuring average speed
 - I can state 1 con with measuring average speed
 - I can describe a way to improve the average speed experiment
-

Definitions

- I can state what a force is
 - I can state what a force can change
 - I can state the unit of force
 - I can state the device used to measure a force
-

Resultant, Balanced and Unbalanced Forces

- I can describe the terms:
 - Resultant force
 - Free Body Diagram
 - Unbalanced Force
 - Balanced Force
 - I can use a free body diagram to calculate the resultant force on an object
 - I can describe how an unbalanced fore affects the motion of an object (Newton's 2nd Law)
 - I can describe how an balanced fore affects the motion of an object (Newton's 1st Law)
-

Friction

- I can state what friction is
- I can state the friction Energy Change
- I can state the direction Friction acts

- I can describe how friction and engine speed relates to a car's speed
 - I can give at least 2 examples of useful friction
 - I can give at least 2 examples of nuisance friction
 - I can state at least 2 ways to reduce friction
-

Examples of Forces

Mass and Weight:

- I can describe:
 - Mass
 - Weight
 - Gravitational Field Strength
- I can state the units off:
 - Mass
 - Weight
 - Gravitational Field Strength
- I can state the mass and weight equation
- I can state the gravitational field strength on earth
- I can apply the mass and weight equation to problems on earth
- I can state wether mass or weight remains constant on all planets
- I can state wether mass or weight varies on different planets
- I can apply the mass and weight equation to problems on other planets

Magnetism:

- I can name the 2 poles of a magnet
- I can name the situation with 2 magnets will attract
- I can name the situation with 2 magnets will resell
- I can sketch the magnetic field lines around a bar magnet
- I can state the direction magnetic field lines must be drawn.

Electromagnetism:

- I can state what an electromagnet is
- I can suggest a benefit of electromagnets
- I can describe an application of electromagnets
- I can describe how to make an electromagnet
- I can draw a diagram of an electromagnet
- I can state how the number coils of wire affects the strength of an electromagnet
- I can state how the supply voltage coils affects the strength of an electromagnet