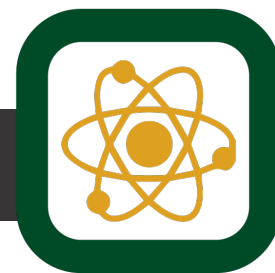


LEARNING JOURNEY

Physics



FORCES

Year 7 Spring Half Term

Forces can act in contact or at a distance and can be a push, a pull, or a turning force.

Forces are central to an understanding of physics because they connect the ideas of mass, energy, distance and movement.

You will conduct experiments to demonstrate the interaction of forces and begin to calculate values from formulae, which is a vital skill in physics.

What is a force?

You will describe forces as a push or a pull and contact or non-contact.

Friction

You will describe friction and use a practical to compare different surfaces.

Spring Extension

You will carry out an investigation into Hooke's Law to study compression or stretching forces

Gravity

You will explain the force of gravity on different planets, and calculate weight from mass and g .

Balanced Forces

You will draw free-body diagrams and calculate resultant forces on objects.

Moments

Moments are turning forces. You will calculate and compare them for objects that can rotate.

Work Done

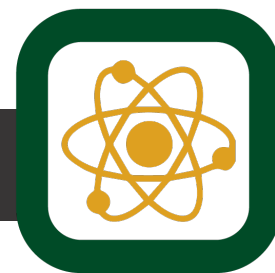
You will define power and work in terms of energy, and calculate work done in energy transfers

TUDOR HABITS AND VALUES: Focus on process not product as you make calculations and draw graphs. Learning skills is more important than getting the answer right just once.

VOCABULARY: Weight, Resultant Force, Field, Compression, Tension, Friction, Mass, Contact/Non-Contact, Equilibrium, Newton, Upthrust

LEARNING JOURNEY

Physics



FORCES

Year 7 Spring Half Term

Forces can act in contact or at a distance and can be a push, a pull, or a turning force.

Forces are central to an understanding of physics because they connect the ideas of mass, energy, distance and movement.

You will conduct experiments to demonstrate the interaction of forces and begin to calculate values from formulae, which is a vital skill in physics.

What is a force?

You will describe forces as a push or a pull and contact or non-contact.

Friction

You will describe friction and use a practical to compare different surfaces.

Spring Extension

You will carry out an investigation into Hooke's Law to study compression or stretching forces

Gravity

You will explain the force of gravity on different planets, and calculate weight from mass and g .

Balanced Forces

You will draw free-body diagrams and calculate resultant forces on objects.

Moments

Moments are turning forces. You will calculate and compare them for objects that can rotate.

Work Done

You will define power and work in terms of energy, and calculate work done in energy transfers

TUDOR HABITS AND VALUES: Focus on process not product as you make calculations and draw graphs. Learning skills is more important than getting the answer right just once.

VOCABULARY: Weight, Resultant Force, Field, Compression, Tension, Friction, Mass, Contact/Non-Contact, Equilibrium, Newton, Upthrust