



## Year 7 Physics Learning Map



- TERM 1 -

### Energy

Energy is essential to life and all living organisms. In this topic, we explore the idea that stores of energy are needed to make most things happen. It looks at food, energy stores and transfers, and energy resources in terms of non-renewable fuels and renewable resources.



#### LINKS TO PRIOR LEARNING

From KS2 most students will be able to:

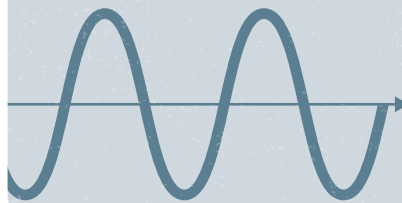
- Recall that temperature is a measure of how hot or cold something is and be able to use thermometers to measure temperature.
- Describe some materials as thermal conductors and some as thermal insulators have seen materials burning and understand that burning is an irreversible change.
- Recall that plants need sunlight to grow and that animals, including humans, need food.



- TERM 2 -

### Forces

Without forces our world would be silent and immobile. In this topic, we explore different types of forces and how these forces affect the shape and movement of various objects around us.



#### LINKS TO PRIOR LEARNING

From KS2 most students will be able to:

- Describe different kinds of forces, including magnetism, gravity, upthrust and friction, and be able to classify these as contact or non-contact forces.
- Identify the effect of drag forces that act between moving surfaces.
- Describe why moving objects that are not driven tend to slow down.



- TERM 3 -

### Motion

Force and motion are important parts of everyday life. In this unit, we will learn how these physical factors impact our lives and work. We explore the idea of speed and relative speed and representing journeys on distance–time graphs.



#### LINKS TO PRIOR LEARNING

From KS3 most students will be able to:

- Identify forces on stationary and moving objects.
- Describe the effects of balanced and unbalanced forces on objects.
- Recall ways in which energy can be stored and transferred and identify energy stores and transfers in different situations.

