



## Physical Sciences (Year 8) – 2012

### Year 8 Level Description

In Year 8, students identify different forms of energy. They describe how energy transfers and transformations cause change in simple systems. Students use experimentation to isolate **relationships** between components in **systems** and explain these **relationships** through increasingly complex representations. They make predictions and propose explanations, drawing on **evidence** to support their views. amounts

#### Content description:

1. Energy appears in different forms including movement (kinetic energy), heat and potential energy, and causes changes within systems.

#### Elaborations:

1. recognising that kinetic energy is the energy possessed by moving bodies
2. recognising that potential energy is stored energy, such as gravitational, chemical and elastic energy
3. investigating different forms of energy in terms of the effects they cause, such as gravitational potential causing objects to fall and heat energy transferred between materials that have a different temperature
4. recognising that heat energy is often produced as a by-product of energy transfer, such as brakes on a car and light globes
5. using flow diagrams to illustrate changes between different forms of energy

#### Assessments:

| Assessment             | Value % |
|------------------------|---------|
| Practical test         | 30      |
| Research investigation | 30      |
| Test                   | 30      |
| Homework               | 10      |

A detailed breakdown of the programme can be found on the College website in the Science Learning Area.