**Energy Revision Sheet**

**Word List**

**Energy** = the ability to do work, there are nine different types

**Kinetic Energy** = energy of moving things

**Gravitational Potential Energy** = energy stored in objects above the ground

**Thermal Energy** = heat energy

**Elastic or Strain Energy** = energy stored in stretched objects (like a spring)

**Chemical Energy** = energy stored inside chemicals like fuels

**Nuclear Energy** = energy stored in the nucleus of the atom

**Electrical Energy** = energy carried by electricity

**Fuels** = substance that stores chemical energy that can be released as heat and light when burnt (combusted)

**Fossil Fuels** = fuels made from dead plants and animals buried in the ground for millions of years

**Non-renewable** = describes energy resources that will run out

**Renewable** = describes energy resources that won’t run out

**Hydroelectric Power** = energy resource using energy from moving water

**Solar Power** = energy resource using energy from the sun

**Geothermal Power** = energy resource using energy from heat deep inside the earth

**Biomass Power** = energy resource using energy stored in plants

**Power Station** = a factory that transfers other types of energy into electrical energy, electricity, that we can use

**Generator** = machine that transfers kinetic energy from a turbine to electrical energy, generates electricity

**Turbine** = machine with blades that spin to and transfers energy to a generator

**Scientific Concepts**

I can…

1. Recall the nine different types of energy.
2. Describe energy transfers in everyday situations (like turning on a light bulb).
3. Recall that energy is measured in joules (J) and 1 kilojoule = 1000 joules.
4. Recall that food stores chemical energy and use food labels to analyse the amount of energy stored in different foods.
5. Describe what a fuel is, give examples of fuels, and how fossil fuels are formed.
6. Explain the difference between non-renewable and renewable energy resources.
7. Explain why fossil fuels are non-renewable.
8. Describe a variety of alternative energy resources (such as solar, hydroelectric, and geothermal power).
9. Explain how electricity is generated in a power station.
10. Explain how all energy (except for geothermal and tidal) originally comes from the sun.