## CURRICULUM-LINKED ACTIVITY PLANS

## National Curriculum in England: Science Programme of Study

- appreciating the power and limitations of science and considering ethical issues which may arise
- explaining everyday and technological applications of science; evaluating associated personal, social, economic and environmental implications;
- non-communicable diseases
- Homeostasis
- how the genome, and its interaction with the environment, influence the development of the phenotype of an organism
- the potential impact of genomics on medicine
- the uses of modern biotechnology including gene technology; some of the practical and ethical considerations of modern biotechnology

## **AQA GCSE Specification**

- Blood glucose concentration is monitored and controlled by the pancreas.
- If the blood glucose concentration is too high, the pancreas produces the hormone insulin that causes glucose to move from the blood into the cells. In liver and muscle cells excess glucose is converted to glycogen for storage.
- Students should be able to explain how insulin controls blood glucose (sugar) levels in the body.
- Type 1 diabetes is a disorder in which the pancreas fails to produce sufficient insulin. It is characterised by uncontrolled high blood glucose levels and is normally treated with insulin injections.



