

European Robin (*Erithacus rubecula*)

A T G G G C G T G A A C G C C G T G C A C



This gene plays an important role in the body clock of the robin, telling it when to be active and when to be inactive.

Why do you think animals have a body clock? Do you have one?

Himalayan Balsam (*Impatiens glandulifera*)

A T G G T T C A G A A G G G A G T T G A T



This gene plays a role in protecting the seeds from microbes such as fungi and bacteria when they are growing in the soil.

Why does the plant have this adaptation? What could happen if it didn't have this gene?

Common Starfish (*Asterias rubens*)

A T G C C A C C A A A G C C A T C A G G A



This gene is essential to the starfish. It make a protein that DNA wraps around, a bit like a cotton reel, helping to fit all the DNA inside the nucleus of the cell.

Why do you think this is important for the starfish? Do you think other animals have this gene?

Asian Hornet (*Vespa velutina*)

G G C C T G C T G C C C A A G G T G A A G



This gene makes a toxin that is found in the venom of the Hornet. It can cause an allergic reaction in humans.

Why do you think the hornet has this gene? What does it use its venom for?

Oxford Ragwort (*Senecio squalidus*)

A T G G A A G T T T A T T C T A G A A T T A



This gene protects the plant by making a protein that breaks down toxic chemicals that can build up in its cells.

Why is this a useful adaptation? Do you think that other plants have this gene?

Grey Squirrel (*Sciurus carolinensis*)

A T G G C C C A G A G G T G G G A C C C C



This gene produces a protein found in the eye. It helps the squirrel to see in dim light.

Why do you think the squirrel needs good vision?