## **Bitesize**

## **Genetic engineering**

MEGAN That's it Megan. Like a ninja. Nailed it.

Thanks for that Loki! How long have you been plotting that one? I'll have to get you a glow-in-the-dark cat

collar.

ALFRED Searching for glow-in-the-dark cat.

MEGAN Ha. You what?

ALFRED To make a cat glow in the dark scientists remove

specific genes from an organism's DNA, and slot it into a gap that's in another organism's DNA. This means that you can choose a part of an organism's DNA that's useful. Like the bit that makes jellyfish glow in the dark, and put that into the DNA of another

organism like a cat!

MEGAN They can actually do that?

ALFRED Yes.

This technology has many useful applications. From making insulin using bacteria for people suffering from type 1 diabetes to crops that can be cultivated to contain more vitamins and grow more efficiently. Genetic engineering can improve but also alter things we don't know about yet. It can be very expensive, and potentially disrupt nature's delicate balance which raises ethical concerns for some.

MEGAN Yeah, but glow-in-the-dark cats? Amazing!

ALFRED Indeed. By inserting DNA into a cat embryo cell, Loki

here can be your very own personal walking lamp.

MEGAN Now that would make sneaking back in a lot easier.

MEGAN'S Megaaaan! DAD