

Questions and Answers

Question 1

Explain how your body is cooled on a very hot day.

The Answer

You sweat.

Examiner's Note

Yes, this student was right, but the answer is worth only **one** mark as they only made one point and did not explain in more detail.

The Answer

The hypothalamus detects a rise in body temperature so you start to sweat and this cools you down.

Examiner's Note

This is just worth three marks. This student says three things: a) the hypothalamus detects a change in body temperature, b) when you are too hot you sweat, and c) sweating cools you down.

The Answer

An increase in body temperature is detected by a part of the brain called the hypothalamus. Messages are sent to the sweat glands telling them to secrete sweat. When the sweat evaporates it takes heat from the skin. You also vasodilate, this means that blood carries more heat into the skin, the heat is lost to the air and you cool down.

Examiner's Note

Superb! This is a complete answer, the student even used the word **vasodilate** and explained it.