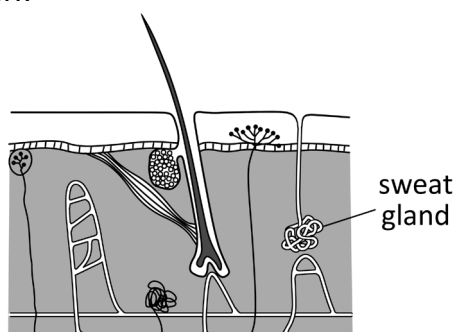


Name:

Class:



The diagram shows a section through human skin.



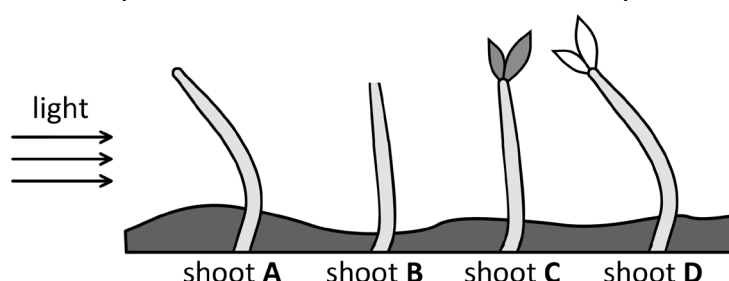
The maintenance of a stable internal environment is called **homeostasis**.

Explain how blood vessels reduce the amount of heat lost from the body.

An explanation including **three** of the following:

- Vasoconstriction.
- blood vessels near to the surface of the skin narrow.
- This reduces blood flow
- So, less heat lost by radiation.

The diagram shows some plant shoots one week into an experiment.



i. The growth response shown by shoot A and shoot D is an example of?

Positive phototropism.

ii. Explain how shoot A and shoot D show this growth response.

An explanation to include **three** of the following points:

- The plant (shoot) has grown towards the sunlight.
- Auxin.
- Diffuse / move / collect / more on shaded side of the shoot.
- Cell elongation (on the shaded side).

iii. Explain why shoot B did not respond in the same way as shoot A and shoot D.

- The tip has been removed.
- Tip is where auxin is (produced).
- (auxin) did not move to shaded side.

Describe how malaria is transmitted.

By the vector of a female mosquito.

Accept by the bite of a mosquito.

Fungal cells have walls made of **chitin**.

Bacterial cells have walls made of **peptidoglycan**.

Enzymes can be denatured. In terms of substrates what does "denatured" mean?

The substrates can no longer bind to the active site as the active site of the enzyme has changed shape.