

**GCSE Biology B (Twenty First Century Science)**  
**J257/01 Breadth in Biology (Foundation)**

**Question Set 12**

Multiple Choice Questions

1. Blackworms are animals that can reproduce sexually **and** asexually.

(a) Four students discuss blackworm reproduction.

**Amir**  
There is much more genetic variation, which will be beneficial if their environment changes.

**Beth**  
It occurs at a much slower rate.

**James**  
They don't need to worry if they can't find a mate, they can reproduce without one.

**Mia**  
The only variation that the worms would have would be a result of mutations.

(i) Which student gives an **advantage** of the blackworm reproducing **asexually**?

Tick (✓) **one** box.

Amir

Beth

James

Mia

  
  
  

[1]

(ii) Which student gives a **disadvantage** of the blackworm reproducing **asexually**?

Tick (✓) **one** box.

Amir

Beth

James

Mia

  
  
  

[1]

(iii) Which student gives an **advantage** of the blackworm reproducing **sexually**?

Tick (✓) **one** box.

Amir

Beth

James

Mia

  
  
  

[1]

(iv) Which student gives a **disadvantage** of the blackworm reproducing **sexually**?

Tick (✓) **one** box.

Amir

Beth

James

Mia

[1]

(b) When blackworms reproduce asexually they split into two pieces. The pieces grow a newhead and a new tail.

What type of cells must be present to allow the pieces to do this?

Tick (✓) **one** box.

Differentiated cells

Gamete cells

Meristem cells

Unspecialised cells

[1]

(c) Earthworms are a different type of worm. They are classified into a different group.

What sources of evidence do scientists use to classify species into different groups?

Tick (✓) **two** boxes.

DNA

Physical similarities and differences

Their age

What they feed on

Where they are found

[2]

**Total Marks for Question Set 12: 7**

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