

Question 23 (Answer: **A**)

- Asexual reproduction produces offspring genetically identical to the parent.
- So every new plant will have the same large, sweet fruit.
- Sexual reproduction would mix in another plant's alleles and the fruit could differ.

Question 23 (Answer: **A**)

- Asexual reproduction involves one parent and no gametes.
- A bacterium dividing into two identical cells is exactly that.
- Any case involving eggs, sperm or fertilisation is sexual reproduction.

Question 27 (Answer: **A**)

- Budding is asexual reproduction, involving only mitosis.
- So the offspring is genetically identical to the parent – a clone.
- No gametes and no fertilisation are involved.

Question 28 (Answer: **D**)

- Asexual reproduction involves only mitosis – there are no gametes and no fusion of nuclei.
- The offspring are therefore genetically identical to the parent.
- So there is no genetic variety, and no fusion of gamete nuclei.

Question 27 (Answer: **B**)

- Growing a new plant from a tuber is asexual reproduction, using only mitosis.
- So potato Y is genetically identical to potato X.
- No gametes, no fertilisation and no genetic variation are involved.