

Chapter 14

Inheritance and evolution

Test yourself questions

- 1 From where does a baby boy get his sex chromosomes?
- 2 Two animals with genotypes Aa were mated. Allele A gives black hair and allele a gives white hair. What can we predict about their offspring?
- 3 What happens during mitosis?
- 4 When does meiosis take place?

5 In a species of plant, the allele for hairy leaves, H, is dominant to the allele for smooth leaves, h.
Two plants were crossed, and the resulting seeds grown. Half of the new plants had hairy leaves and half had smooth leaves.
What were the genotypes of the original two plants?

6 Which is an example of discontinuous variation?

7 How is genetic engineering defined?

S 8 Why does sickle cell anaemia tend to be most common in areas where malaria is also present?

9 A woman with blood group A and a man with blood group B had a child with blood group O.
What was the genotype of the woman?

S 10 Populations of bacteria that are resistant to an antibiotic often arise when the antibiotic has been used for some time.
How does this happen?