AQA Biology A-level

4.5 - Species and taxonomy

Flashcards

Define species.

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A group of organisms that can interbreed to produce fertile offspring.

What are the advantages of courtship behaviour?

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Individuals can recognise sexually mature members of their own species of the opposite sex, synchronise mating, form a pair bond, and successfully breed.

Define classification.

Define classification.

The process of arranging organisms into groups.

Name the eight groups in the classification hierarchy, from largest to smallest.

Name the eight groups an organism can be classified into, from largest to smallest.

domain → kingdom → phylum → class → order → family → genus → species

What system is used to give species a universal name?

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Binomial naming system.

What are the two components to a binomial name?

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Generic name= the genus the organism belongs to. Two closely related species will share the same genus.

Specific name= the species the organism belongs to.

How are binomial names handwritten?

How are binomial names handwritten?

The first letter of the generic name should be capitalised, with the rest in lowercase. The whole name should be underlined.

What is phylogenetic classification?

What is phylogenetic classification?

The process of arranging organisms into groups based on their evolutionary origins and relationships.

How can we clarify evolutionary relationships between organisms?

How can we clarify evolutionary relationships between organisms?

Analyse their molecular differences.

Advances in immunology/genome sequencing provide clear pictures of how related two organisms are.

Explain hierarchical classification.

Explain hierarchical classification.

- groups within groups
- no overlap between groups