Ecological relationships and classification
Lesson 14 - Revision 2

Biology - Key Stage 3

Miss Lewis

Quick Fire Questions - Classification

1. Grouping organisms together based on structure and characteristics is known as .....
2. Organisms are divided into 5 main groups called .....
3. As you move down the system the organisations within each group are .....

This is the classification for a red fox
What is the order?

Animalia

Chordata

Mammalia

Carnivora

Canidae

Vulpes

vulpes

This is the classification for a ring-tailed lemur. What is the class?

Animalia

Chordata

Mammalia

Primates

Lemuroidea

Lemur

catta

This is the classification for a english green crab. What is the family?

Animalia

Arthropoda

Crustacea

Decapoda

Portunidae

Carcinus

maenas

Task

1. Which organism is in a different kingdom?
2. Which animal does not have a spinal cord?
3. Which organisms are in the same class?
4. Which two organisms are the most closely related? How do you know from the table?

Wheat	Armyworm	Horse	Zebra	Lion
Plantae	*Animalia*	*Animalia*	*Animalia*	*Animalia*
Angiospeerms	*Arthropoda*	*Chordata*	*Chordata*	*Chordata*
Monocotyledons	*Insecta*	*Mammalia*	*Mammalia*	*Mammalia*
Commelinids	*Lepidoptera*	*Perissodactyla*	*Perissodactyla*	*Carnivora*
Poaceae	*Noctuidae*	*Equidae*	*Equidae*	*Felidae*
Triticum	*Spodoptera*	*Equus*	*Equus*	*Felis*
spelta	*frugiperda*	*ferus*	*grevyi*	*domesticus*

Quick Fire Questions - Classification

1. In which climate would a suitable adaptation be a layer of fat? .....

   .....

2. Why do animals in hot climates have large ears? .....

   .....

3. In which climate would a suitable adaptation be thin fur? .....

   .....

4. Which is a suitable adaptation for plant living in a desert?.....

   .....

5.

Exam Style Question - model

Explain two ways in which a musk ox is adapted for survival in the arctic.

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Exam Style Question

Explain two ways in which a cactus is adapted for survival in the desert.

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Exam Style Question

Explain two ways in which a spider monkey is adapted for survival in the rainforest.

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Correct the mistakes in the answer

Describe how the hedgehogs have evolved to have spikes through natural selection.

Environmental variation due to genetic mute meant that some hedgehogs developed spikes. The hedgehogs are sharing food and do not want to get eaten by prey. The spiked hedgehogs are worse adapted because they can defend themselves from predators. The spiked hedgehogs are more likely to die and breed. The spiked hedgehogs are will be more likely to pass on the cells for the spikes to the next generation.

Exam Style Question

Snails are eaten by birds. A particular species of snail that lives in the sand dunes has a striped shell. Sand dunes have clumps of grass growing on them.

Suggested why there are more striped-shelled snails in the sand dunes than plain-shelled snails.

Quick Fire Questions - Natural Selection

1. Why are striped-shelled snails better adapted? .....

   .....

2. How does this affect the birds? .....

   .....

3. What do the snail go on to do? .....

   .....

4. What gets passed on to their offspring? .....

   .....

Exam Style Question

Quick Fire Questions - Evolution Evidence

1. All species have evolved from a common .....
2. Organisms have changed over time to be .....

   .....
3. The theory that supports evolution is called .....
4. The organisms in older fossils are .....
5. Fossils shows how organisms have .....
6. Fossils are evidence for .....

Exam question - model

Archaeopteryx was a bird that had some features of a reptile.

Archaeopteryx is now extinct, but fossil evidence of its existence has been found.

Darwin believed that living things gradually changed to become new species.

Suggest how Archaeopteryx fossil evidence supports Darwin's theory. **(2)**

Exam question



Exam question

Ichthyosaur was a reptile that had some features of a fish.

Ichthyosaur is now extinct, but fossil evidence of its existence has been found.

Darwin believed that living things gradually changed to become new species.

Suggest how Ichthyosaur fossil evidence supports Darwin's theory. **(2)**

Exam question

