Variation

Genes 3.10.1 | Part 1, usually Year 7 | 20 quick questions

KS3 science quick questions

Answer online, marked instantly

Activate 2: Inheritance; Activate 3: Variation and natural selection | Exploring Science 9A

Name: _____ **Date:** _____ **Score:** _____ **/ 20**

1 What is the word for the differences between living things?

2 What is the word for a group of organisms that can breed together to produce offspring that can also breed?

3 Is variation between two pet cats an example of variation within a species or between species?

4 Eye colour is passed on from parents. Is this inherited or environmental variation?

5 A scar from falling off a bike is caused by your surroundings and what happens to you. Is this inherited or environmental variation?

6 Your body mass depends on your genes and also on what you eat. Is this variation inherited, environmental or both?

7 Height can be any value within a range. What type of variation is this?

8 Blood group can only be A, B, AB or O. What type of variation is this?

9 Is being able to roll your tongue continuous or discontinuous variation?

10 Is the length of people's feet continuous or discontinuous variation?

11 Discontinuous data, such as eye colour, is shown on a chart with separate bars that have gaps between them. What is this chart called? Answer in two words.

12 Which type of chart shows continuous data, such as arm span, in groups with no gaps between the bars?

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13 Heights of a whole year group are plotted. Most pupils are in the middle, with few very short or very tall. What is this bell-shaped pattern called?

14 Living things compete for things they need. Name one thing that plants compete for.

15 Identical twins have exactly the same genes. If they differ in a feature, what must cause the difference? Answer in one word.

Year 9 stretch

16 Explain why variation within a species helps some of them survive when conditions change.

17 Five pupils' hand spans are 18 cm, 20 cm, 19 cm, 21 cm and 17 cm. What is the mean hand span? Give your answer in cm.

18 Using the same hand spans (18, 20, 19, 21 and 17 cm), what is the range? Give your answer in cm.

19 In a dry summer, sunflowers with longer roots grow better than those with short roots. Which resource are they competing for?

20 In a class of 30 pupils, 18 can roll their tongue. What percentage of the class can roll their tongue?

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