Inheritance, variation and evolution

State the differences between sexual and asexual reproduction

Sexual	Asexual

What are gametes?

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State some examples of environmental and genetic variation

Genetic	Environmental

Describe what the difference is between continuous and discontinuous variation. Give some examples of each.

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Describe what a normal distribution curve is. Sketch one in the box.

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Below sketch a cell to show how the keywords are linked (Nucleus, Chromosomes, DNA, Gene)

What is the human genome?

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What type of graph should we do for each and why?

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Define the term fossil

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State the ways in which fossils can form

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How many chromosomes do we have in all our cells (apart from our sex cells?)

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Describe in detail the process of natural selection through evolution.

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Explain how fossils provide evidence for evolution

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Describe the process of selective breeding

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What are the risks associated with selective breeding?

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Inheritance, variation and evolution (year 10)

What is a gamete? How do the number of chromosomes in a gamete compare to in an ordinary cell?

How many chromosomes in a human cell and human gamete?

Draw a diagram to show the stages of meiosis

Describe the similarities and differences between meiosis and meitosis

Describe what is meant by the terms DOMINANT and RECESSIVE genes and explain how the Phenotype of an organism is determined if it has a heterozygous genotype

Which two chromosomes determine the sex of a human?

What are the combinations of chromosomes that give female and male offspring?

Name two inherited diseases and state whether they are caused by dominant or recessive genes

1.

2.

Define the following

Gene ……..

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Allelle ……

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Genotype ……

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Phenotype ……..

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Homozygous ……..

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Heterozygous ……..

The gene for Brown hair (B) is dominant and the gene for Red hair (r) is recessive. A man and woman, both of genotype Br are expecting a baby

Draw a Punnett square to show the 4 different genotypes and phenotypes of the baby and determine the probability that the child will have red hair