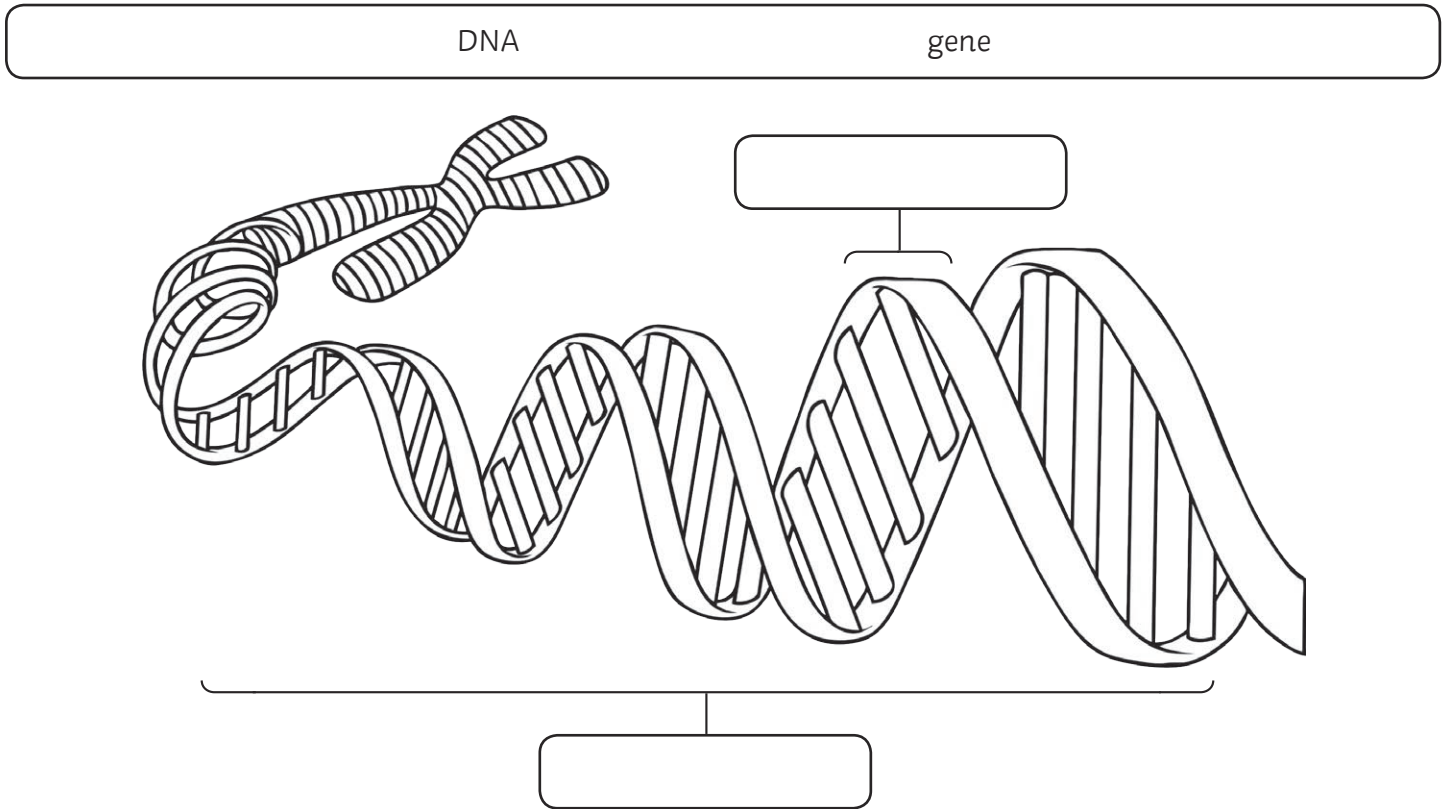


Name:	Class:	Date given:
		Date due in:

Genetics

- What is the name given to the process of passing genetic information from parents to offspring? [1]

- Add the labels from the box to the diagram [2]



- How many chromosomes does a normal human body cell have? [1]

- How many chromosomes does a normal human sperm or egg cell have? [1]

- Crick, Franklin, Watson and Wilkins are scientists known for their work on the structure of DNA. What contribution did each make? Write their names into the table below. [2]

Scientific Contribution	Scientists Involved
Built the first model of DNA	
Produced x-ray data of DNA	

5. Fill the gaps using the words from the box below. [6]

characteristic different environmental genetic species variation

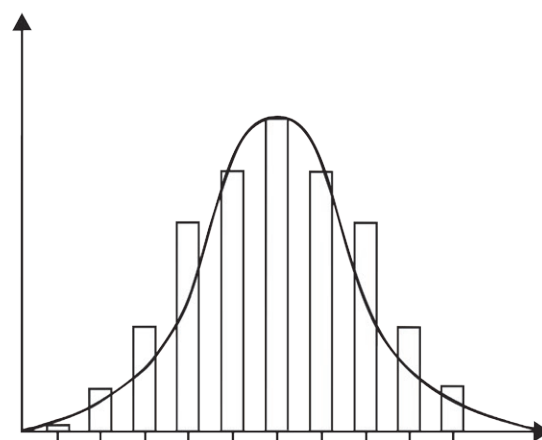
All living things show _____, which means they are _____.

Some living things look different because they are different _____, e.g. a cow and a daisy.

Some living things can look different even if they are the same species. These differences are called _____ features. They can be _____ or _____.

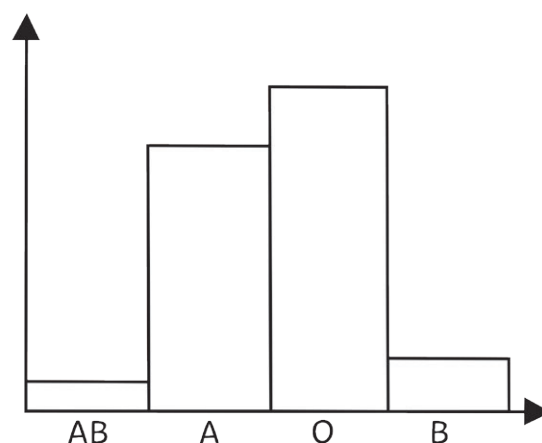
6a. What type of variation does this graph show? [1]

6b. Give another example of a characteristic feature which shows this type of variation. [1]



7a. What type of variation does this graph show? [1]

7b. Give another example of a characteristic feature which shows this type of variation. [1]



Learning Outcomes (tick if achieved)

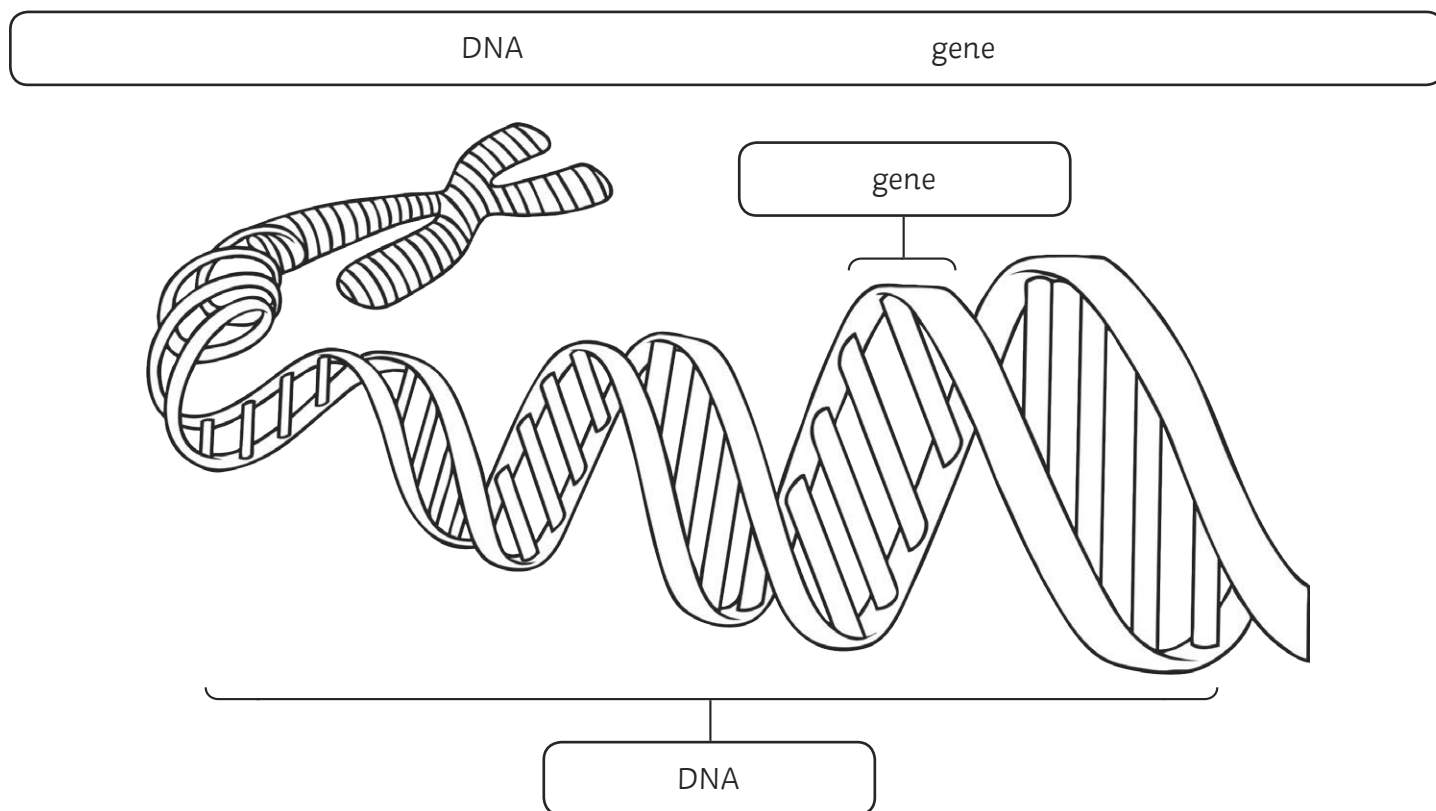
Q1	I can state the process by which genetic information is passed on	
Q2	I can label a simple diagram of DNA and genes	
Q3	I can recall the number of chromosomes in human cells	
Q4	I can state how scientists contributed to the DNA model	
Q5,6,7	I can describe variation in different and same species, and identify variation graphically	

Genetics Answers

1. What is the name given to the process of passing genetic information from parents to offspring? [1]

Inherit / inherited / inheritance

2. Add the labels from the box to the diagram [2]



- 3a. How many chromosomes does a normal human body cell have? [1]

46 (accept 23 pairs)

- 3b. How many chromosomes does a normal human sperm or egg cell have? [1]

23

4. Crick, Franklin, Watson and Wilkins are scientists known for their work on the structure of DNA. What contribution did each make? Write their names into the table below. [2]

Scientific Contribution	Scientists Involved
Built the first model of DNA	Crick, Watson
Produced x-ray data of DNA	Wilkins, Franklin

5. Fill the gaps using the words from the box below. [6]

characteristic different environmental genetic species variation

All living things show **variation**, which means they are **different**.

Some living things look different because they are different **species**, e.g. a cow and a daisy.

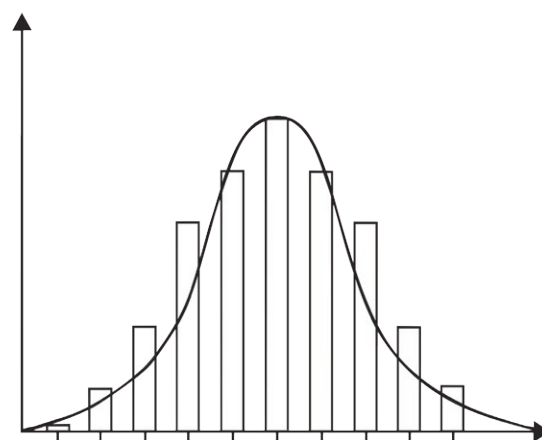
Some living things can look different even if they are the same species. These differences are called **characteristic** features. They can be **genetic** or **environmental**.

6a. What type of variation does this graph show? [1]

Continuous

6b. Give another example of a characteristic feature which shows this type of variation. [1]

mass (weight), skin colour, IQ, leaf area, etc.



7a. What type of variation does this graph show? [1]

discontinuous

7b. Give another example of a characteristic feature which shows this type of variation. [1]

eye colour, fruit colour, shoe size, blood group etc.

