

Name:

Class:



What is a gene?

A short section of DNA that codes for the production of a particular protein.

State three functions of the skeleton.

Movement, protection and support.

Accept provides shape.

Which combination of gametes will produce a **male** baby?

- A** A sperm with **XY** chromosomes and an egg with **XX** chromosomes.
B A sperm with one **X** chromosome and an egg with one **Y** chromosome.
C A sperm with one **Y** chromosome and an egg with one **X** chromosome.
D A sperm with **XX** chromosomes and an egg with **XY** chromosomes.

Where does fertilisation take place in the female reproductive system?

The fallopian tube

Name the two scientists who were credited with determining the 3D model of DNA.

James Watson and Francis Crick.

Some rats are resistant to warfarin (rat poison). When fed with large amounts of warfarin the rats do not die. Scientists found that the resistance is due to the dominant allele **R**.

Two resistant rats (**Rr**) mate.

Complete this genetic diagram to find the ratio of resistant rats to non-resistant rats that would be expected to be produced.

	Rr	
	R	r
R	RR	Rr
r	Rr	rr

Ratio of resistant rats to non-resistant rats

3:1

Describe the process of osmosis.

Osmosis is the movement of water from an area of high water concentration to an area of low water concentration through a partially permeable membrane.

In the space below give the **word** equation for photosynthesis.

carbon dioxide + water → glucose + oxygen