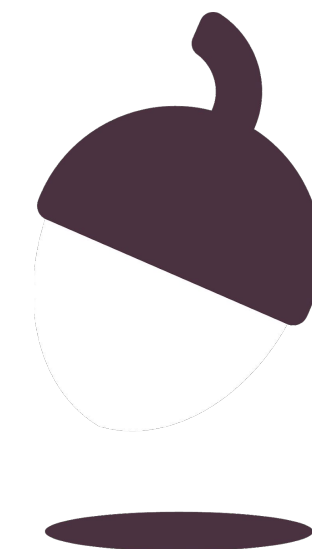


Combined Science - Biology - Key Stage 4

Mid-topic Review

Mrs Gibbs



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Put the stages of meiosis and fertilisation in order.

- **Gametes fuse**
- **The cell divides twice**
- **The cell copies its DNA**
- **The new cell divides by mitosis**
- **Chromosomes pair up**
- **4 genetically different gametes are produced with half the number of chromosomes**



Compare asexual and sexual reproduction **(4)**:

- Both involve mitosis
- Sexual reproduction also involves meiosis, asexual does not
- *Add another similarity:*
- *Add at least one more difference:*



DNA and genes

- 1) Where is DNA found?**
- 2) Describe the structure of DNA.**
- 3) What is a gene?**



Independent task

- What is the probability the offspring will inherit cystic fibrosis?

		Father	
		F	f
Mother	F		
	f		

Percentage:

Proportion:

Ratio:



Practice exam question

1. The sex chromosomes determine the sex of a baby. What are the sex chromosomes of a male and of a female?

Male: _____ Female: _____ **(2)**

2. The data in the table shows the ratio of males to females in England and Wales.

	Ratio of males to females in England and Wales
At birth	105 males : 100 females
Average over the whole population	98 males : 100 females

Describe how sex is determined in humans. You may use a genetic diagram in your answer. **(2)**

OCR- June 2018 -J247/02 Paper 2 - Foundation/Higher - Low, Medium. High - AO1

