

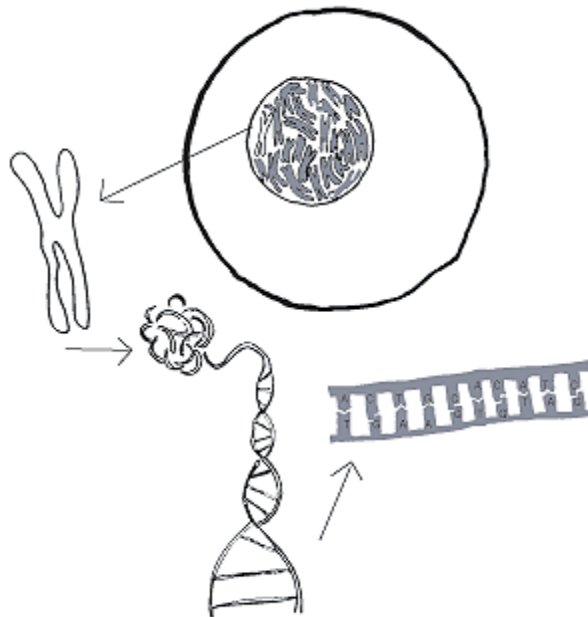
Dalkeith High School
S3 Biology home learning
DNA, Genes and Chromosomes

1. Which of the following statements best describes a chromosome?
- A) It is a gene that has thousands of different forms.
 - B) It has genetic information contained in DNA.
 - C) It is a reproductive cell that influences more than one characteristic.
 - D) It contains hundreds of genetically identical DNA molecules.

Answer: _____

2. Label the following diagram correctly using arrows **AND** the words in the box below.

DNA	CHROMOSOME	GENE	NUCLEUS	A CELL
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3. Complete the following passage. Use the words in the box below to help you.

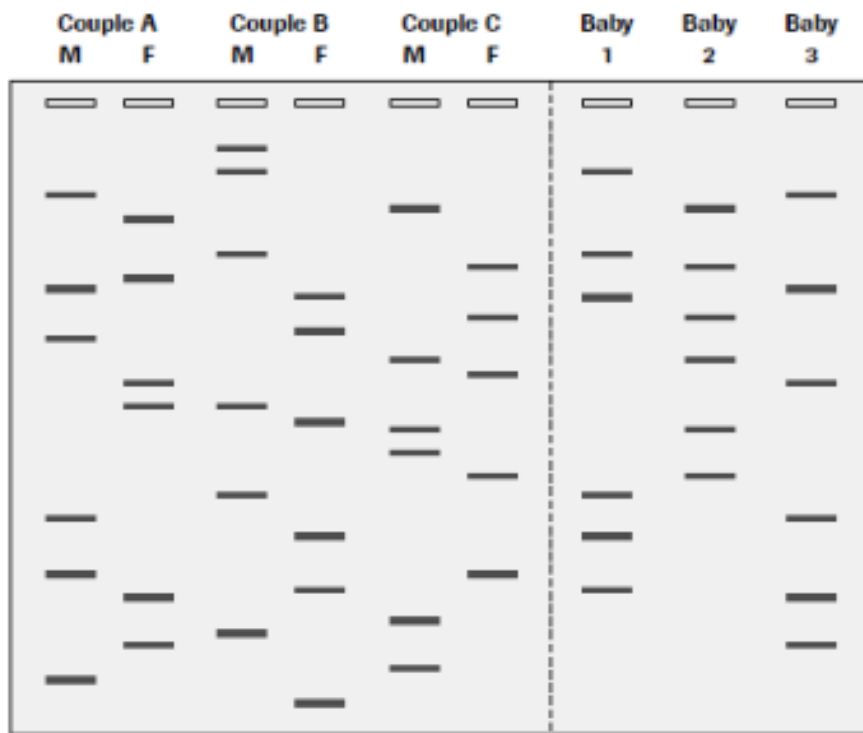
PROTEIN	DAMAGED	CHARACTERISTICS
GENES	MEDICAL	FAULTY HEALTH

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_____ are passed on from parents to their children. Each gene carries the instruction to make a particular _____.

Our _____ and _____ can be determined by these proteins. If a child inherits a _____ gene then a _____ protein may be produced. As a result, the child may inherit a _____ condition such as cystic fibrosis.

4. The diagram below contains DNA fingerprints of three couples and three babies.



(a) Compare the bands of each set of parents to each of the babies and determine which baby belongs to which set of parents.

Parents of Baby 1 _____

Parents of Baby 2 _____

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Parents of Baby 3 _____