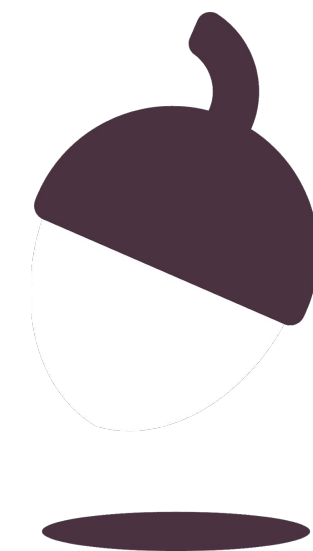


Combined Science - Biology - Key Stage 4

Inherited Disorders - Part 2

Mrs Gibbs



OAK
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Practice exam question

Ali and Mary do not have cystic fibrosis, but their baby does.

What does this tell us about Ali and Mary's genes for this disorder? **(1)**



Independent task

Sickle cell anaemia (a) is a recessive condition.

Explain how we can tell this from the family tree.

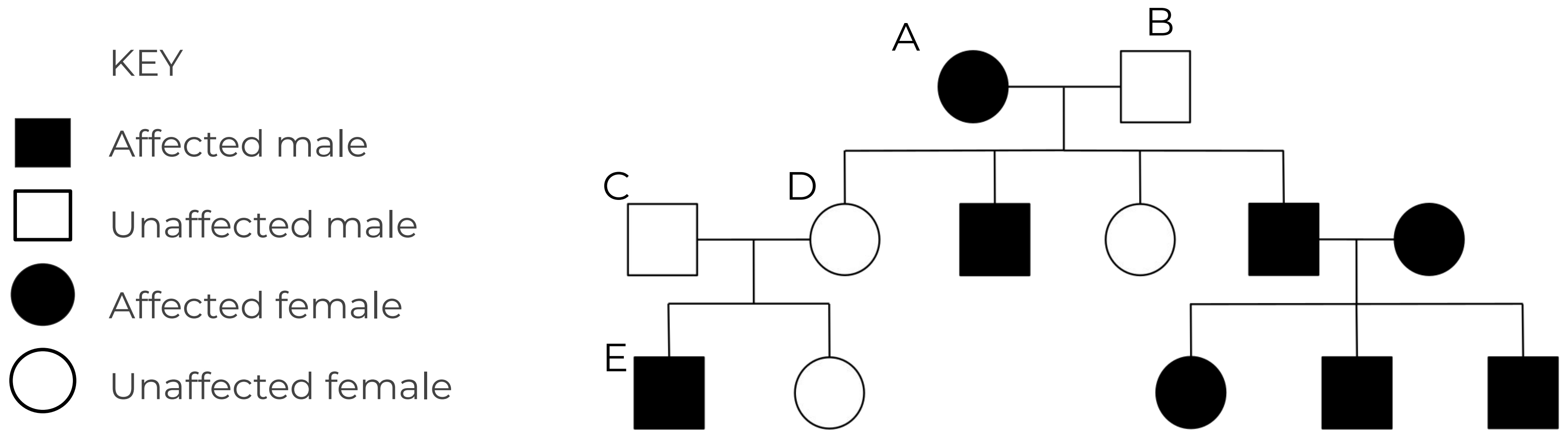


Image adapted from: Wikimedia - Madibc68 - Example of a Classic X-Linked Recessive Pedigree



Exam question

1. Genetic testing can be used for screening adults, children and embryos for genetic disorders.

There are different reasons for genetic testing and the results can lead to different decisions.

Draw a straight line from each **result of the test** to a **possible decision** the person makes.

result of the test	possible decision
embryos are tested and one has a single allele for cystic fibrosis	to tell her children as soon as possible
a fetus has two alleles for cystic fibrosis	which embryo to implant
a fifty-year-old woman has one copy of the allele for Huntington's disorder	to have a termination
a twenty-year-old woman has one allele for Huntington's disorder	not to have any children



Exam-style question

Huntington's disease is a rare condition which can decrease life expectancy. A couple with a family history of Huntington's disease are considering embryo screening before having a baby.

Describe the economical, social and ethical considerations the couple may discuss before choosing to screen for Huntington's disease.

- An economical issue is...
- A social issue is
- An ethical issue is...

