

Key area 4 - Reproduction homework

1. a) Why must organisms reproduce?

1

b) Complete the table below to show the features of sexual and asexual reproduction. Place a tick to show whether the feature is true of asexual reproduction or sexual reproduction.

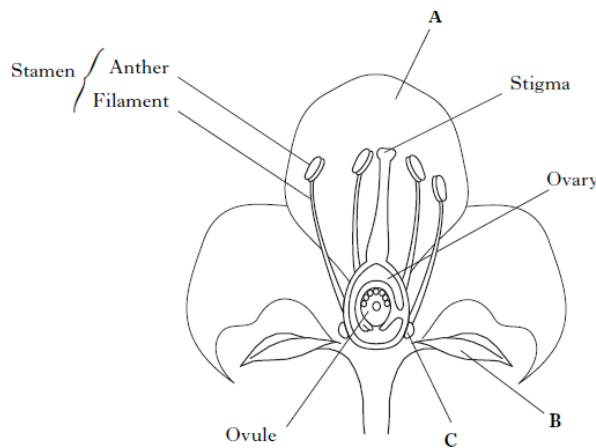
Feature	Asexual	Sexual
One parent is involved		
Increases variation in the population		
Offspring are the same as the parent		
Involves sex cells such as sperm and egg		

2

c) Give one example of asexual reproduction in plants.

1

2. The diagram below shows a cross section through a flower.

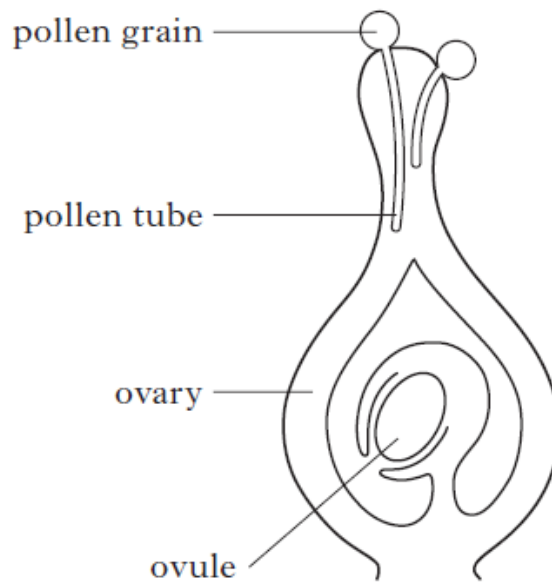


Complete the table below to show the letter, name and function of parts A, B and C.

<i>Letter</i>	<i>Name</i>	<i>Function</i>
	sepal	protects the bud before opening
	petal	
C		produces and stores a sugary solution to attract insects

2

3. a) Draw an **X** on the following diagram to show where the pollen tube reaches when its growth is completed.



1

b) Describe the function of the pollen tube.

1

c) The following statements refer to the stages that occur after pollination.

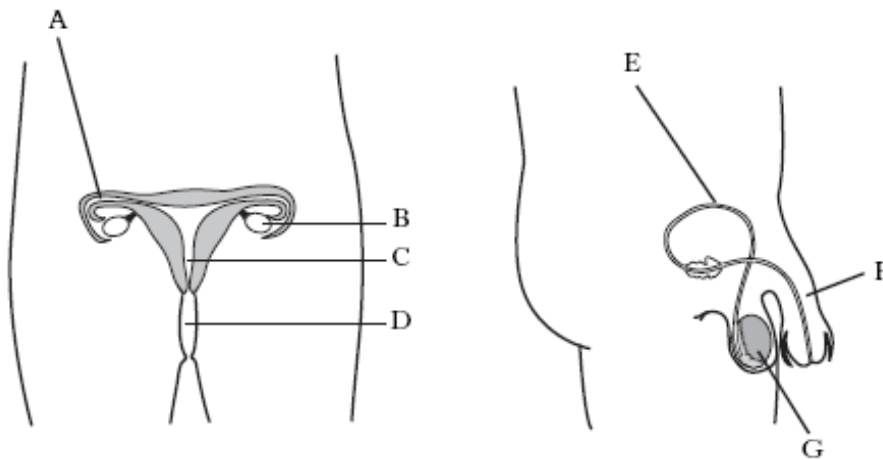
- A Fertilisation takes place
- B A pollen tube grows out from a pollen grain
- C The ovules forms a seed and the ovary forms a fruit
- D The pollen tube grows down through the stigma
- E The male gamete moves towards the ovule
- F The pollen tube grows through the ovary wall

Use the letters of the statements to complete the sequence of stages.



2

4. The diagrams below represent parts of the human male and female reproductive systems



Complete the table below by adding the correct letters, names and functions of the labelled structures.

<i>Letter</i>	<i>Name</i>	<i>Function</i>
A		site of fertilisation
F		deposits sperm
B	ovary	
G	testis	
	uterus	

3

5. Use words from the list to complete the following sentences. Each word may be used once, more than once or not at all.

- List water nucleus membrane
 ovary oviduct uterus

Fertilisation occurs when the _____ of a sperm fuses with the _____ of an egg cell. In mammals this happens inside the female body in the _____. In most fish, sperm are deposited in the surrounding _____ close to the eggs.

2

6. a) Tick the boxes in the table to indicate whether each of the following statements is true for eggs, sperm or both.

Statement	Eggs	Sperm
Contain a food store for developing fetus		
Swim using a tail		
Produced in the testes		
In most fish, are deposited in the water		
Are sex cells (gametes)		

2

b) How many chromosomes are there in each human egg cell?

1

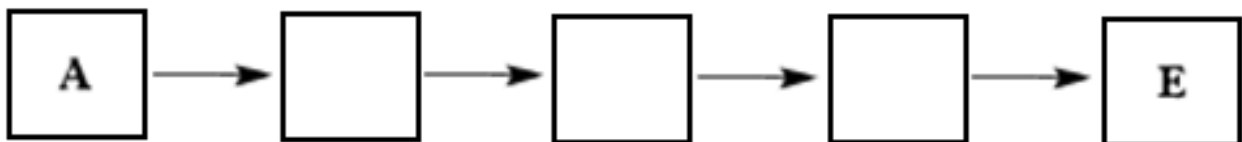
c) What term is used to describe the chromosome complement of sex cells?

1

d) The following list contains descriptions of stages in the reproduction of a mammal.

- A A sperm fertilises an egg
- B The embryo develops in the uterus
- C The embryo becomes attached to the uterus wall
- D A fertilised egg passes down the oviduct
- E The young animal is born

Arrange the stages into the correct order by writing the letters into the boxes.



1