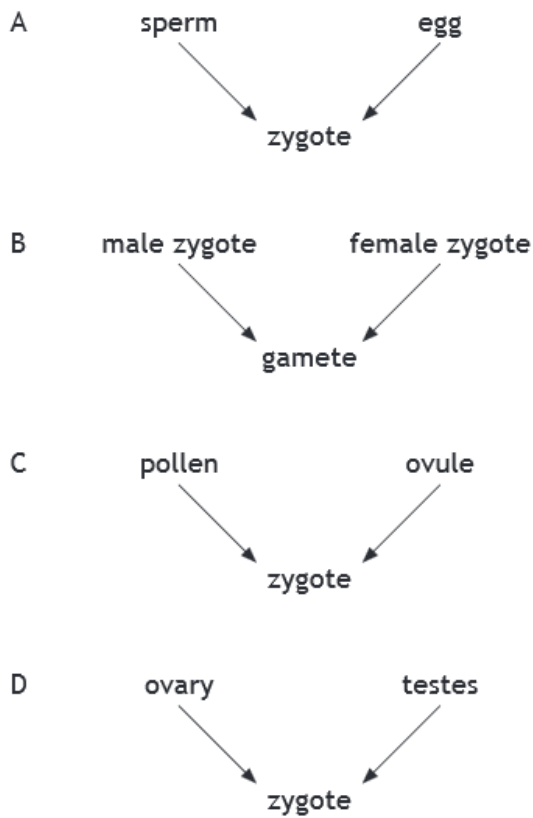


## Reproduction

Which of the following pairs of human cells have the same number of chromosomes?

- A Liver cell and sperm cell
- B Kidney cell and sperm cell
- C Kidney cell and liver cell
- D Liver cell and egg cell

11. Which of the following diagrams represents the process of fertilisation in plants?



7. The diploid number of chromosomes in a cell from a kangaroo is 12.

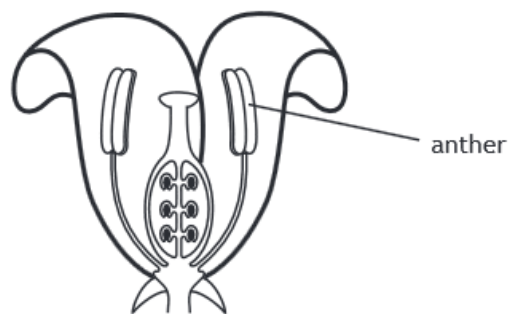
Which line in the table below identifies the number of chromosomes for the cell type shown?

	<i>Kangaroo Cell Type</i>	<i>Number of chromosomes</i>
A	sperm	12
B	skin	6
C	nerve	6
D	zygote	12

8. Each skin cell in a mouse has 40 chromosomes. How many chromosomes were present in each cell after dividing four times during cell culture?

- A 10
- B 20
- C 40
- D 160

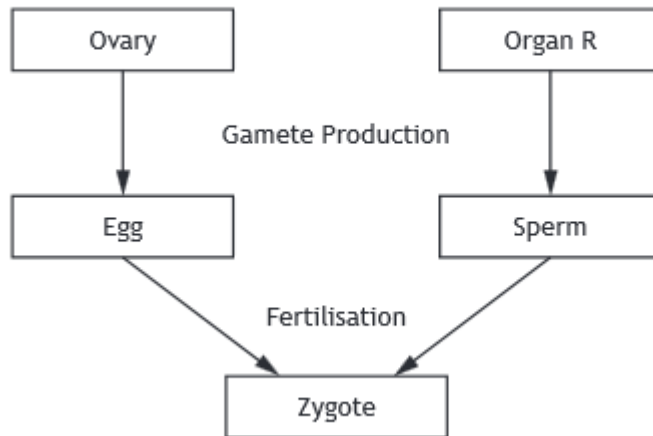
9. The diagram shows the main parts of a flower.



Which row in the table describes the type of gametes produced by the anther and the chromosome complement these gametes contain?

	<i>Type of gamete produced</i>	<i>Chromosome complement</i>
A	female	diploid
B	male	diploid
C	female	haploid
D	male	haploid

(b) The diagram relates to sexual reproduction in humans.



(i) Name organ R. 1

\_\_\_\_\_

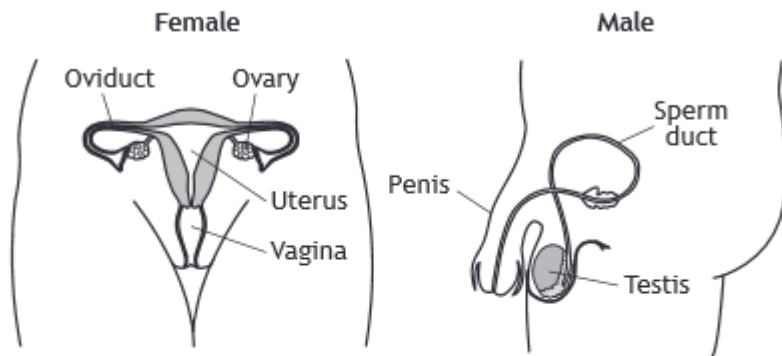
(ii) Describe what happens during fertilisation. 1

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(iii) An egg cell is haploid but a zygote is diploid.  
Explain what this means in terms of the chromosome complement  
found in each of these cells. 1

\_\_\_\_\_

8. The diagrams show the human reproductive system in females and males.

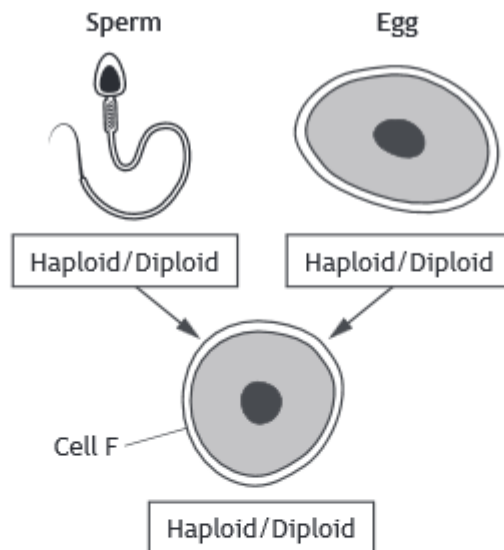


(a) From the diagrams, identify one site of gamete production.

1

\_\_\_\_\_

(b) The diagram represents the process of fertilisation.



(i) In the diagram, circle one term in each box to show the chromosome complement for each cell.

1

(ii) Name cell F which is produced when the sperm fertilises the egg.

1

\_\_\_\_\_