

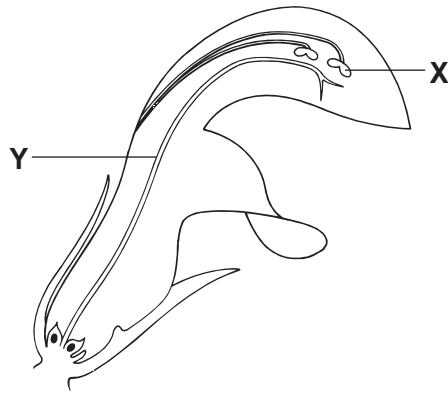
1 The following four processes occur during reproduction in a plant.

- 1 The male nucleus fuses with the female nucleus.
- 2 The male nucleus is released from the pollen tube.
- 3 The male nucleus travels down the pollen tube.
- 4 The pollen grain grows a pollen tube.

In which order do these processes occur after pollination?

	first	→	last	
A	3	4	1	2
B	4	3	2	1
C	3	4	2	1
D	4	3	1	2

2 The diagram shows a vertical section through a flower.

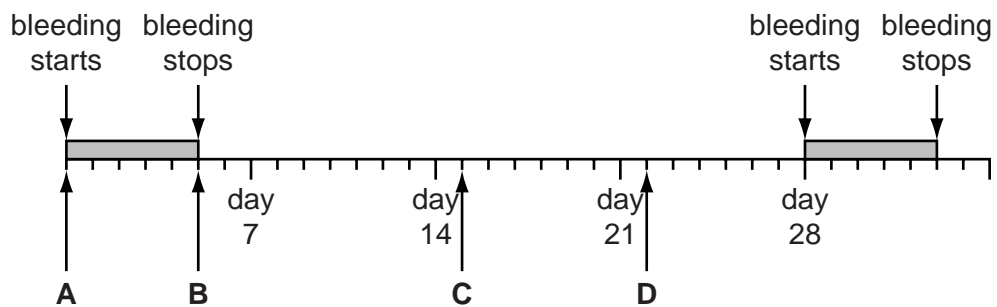


What are **X** and **Y**?

	X	Y
A	anther	filament
B	anther	style
C	filament	stigma
D	stigma	style

3 The diagram shows a woman's menstrual cycle.

On which day is intercourse most likely to result in the woman becoming pregnant?



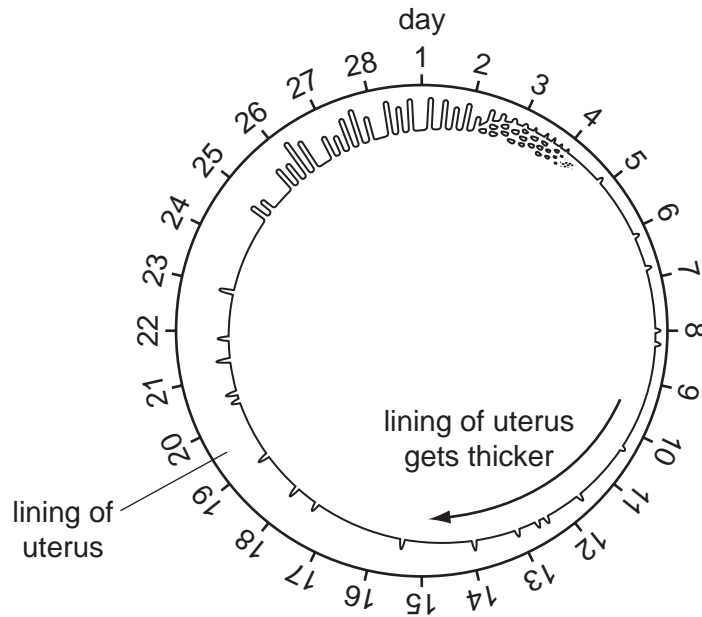
4 What must always be available to seeds before they germinate?

- A** carbon dioxide
- B** light
- C** mineral salts
- D** oxygen

5 Where are the male gametes produced in a flowering plant?

- A petal
- B sepal
- C stamen
- D stigma

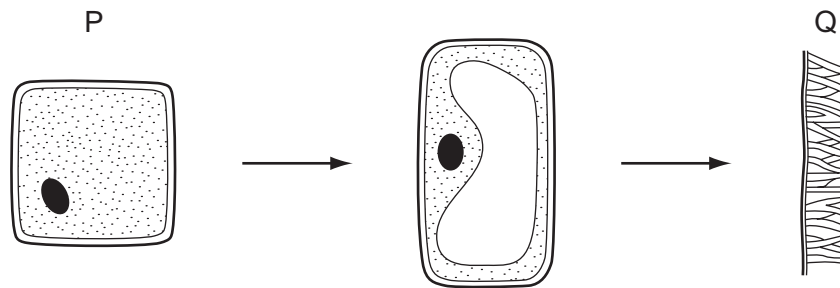
6 The diagram shows the changes that occur to the uterus lining during the menstrual cycle.



When do the following stages occur in this cycle?

	bleeding	lining starts to break down	uterus lining thickens
A	days 13 – 14	days 6 – 25	days 1 – 4
B	days 1 – 4	days 26 – 27	days 6 – 25
C	days 6 – 25	days 1 – 4	days 26 – 27
D	days 1 – 4	days 13 – 14	days 6 – 25

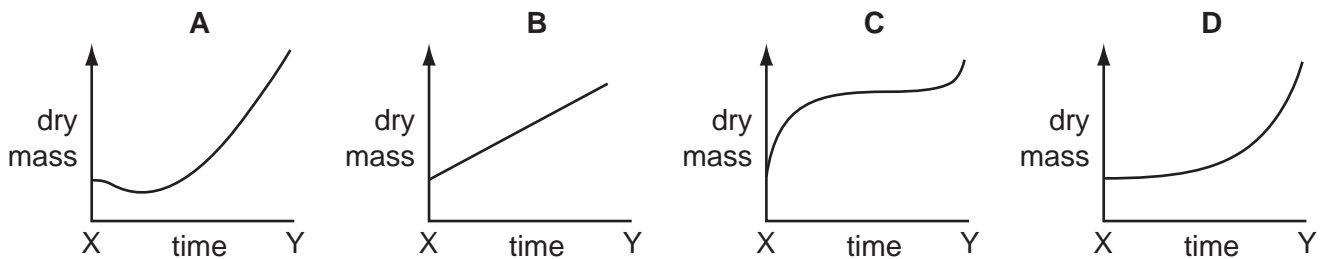
7 The diagrams show a plant cell P changing to become cell Q.



What do the changes between P and Q show?

- A development and germination
- B germination and mitosis
- C growth and development
- D mitosis and growth

8 Which graph shows the change in dry mass from the time a seed starts to germinate (X) until green leaves have appeared above the soil (Y)?



9 How often is an egg usually released from the ovaries of a woman?

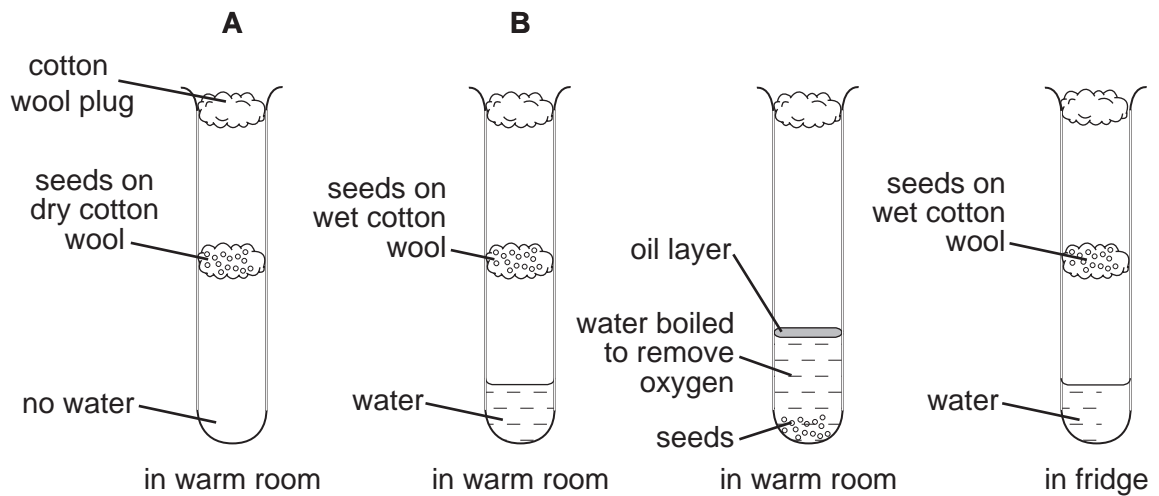
- A once a week
- B once every 14 days
- C once every 28 days
- D once every 9 months

10 Which is correct for sexual reproduction in flowering plants?

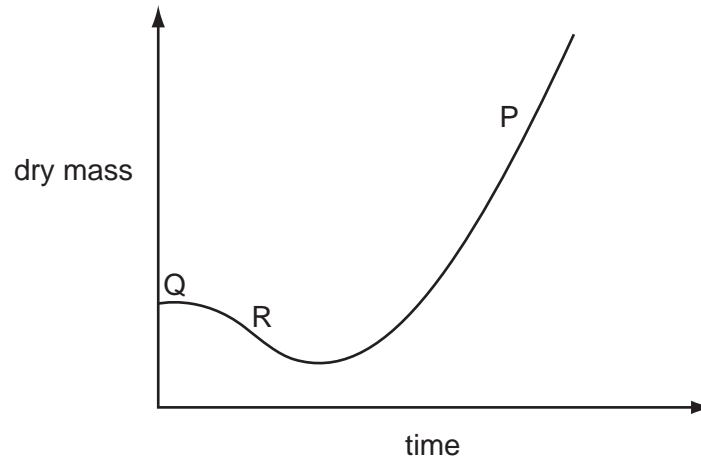
	number of plants involved	number of gametes
A	always 1	more female than male
B	always 1	more male than female
C	1 or 2	more female than male
D	1 or 2	more male than female

11 Four test-tubes were set up as shown in the diagram and left for one week.

In which test-tube would the seeds germinate fastest and grow the most?



12 The graph shows how dry mass of a plant changes with time.



The letters represent three stages in the life cycle of a plant.

Which letter represents each stage?

	green leaves developing	seed	seed germinating
A	P	Q	R
B	Q	R	P
C	R	P	Q
D	Q	P	R