Plant reproduction exam questions

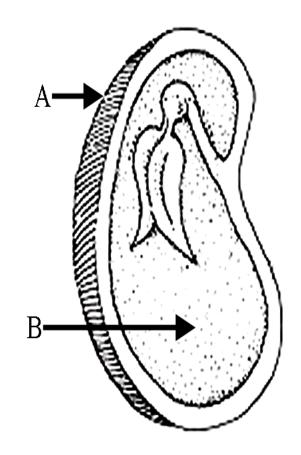
- Asexual and sexual reproduction occur in plants. State how a named plant can reproduce asexually.
- Draw a labelled diagram of a suitable flower showing the stigma, style, ovary, anther and filament

- An insect feeds on a flower and picks up pollen. When the insect visits another flower of the same species it leaves some of the original pollen behind.
- Give a second way in which transfer of pollen between plants occurs.

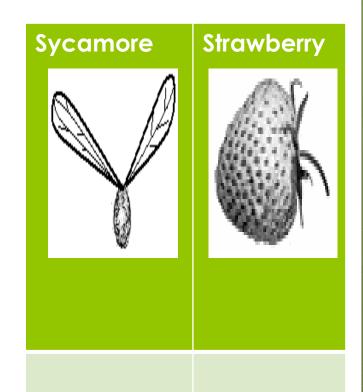
- Name the part of the flower that produces the male gamete.
- Name the part of the flower that produces the female gamete.
- What follows fertilisation in flowering plants?

 The diagram is of a section through a seed showing its structure.

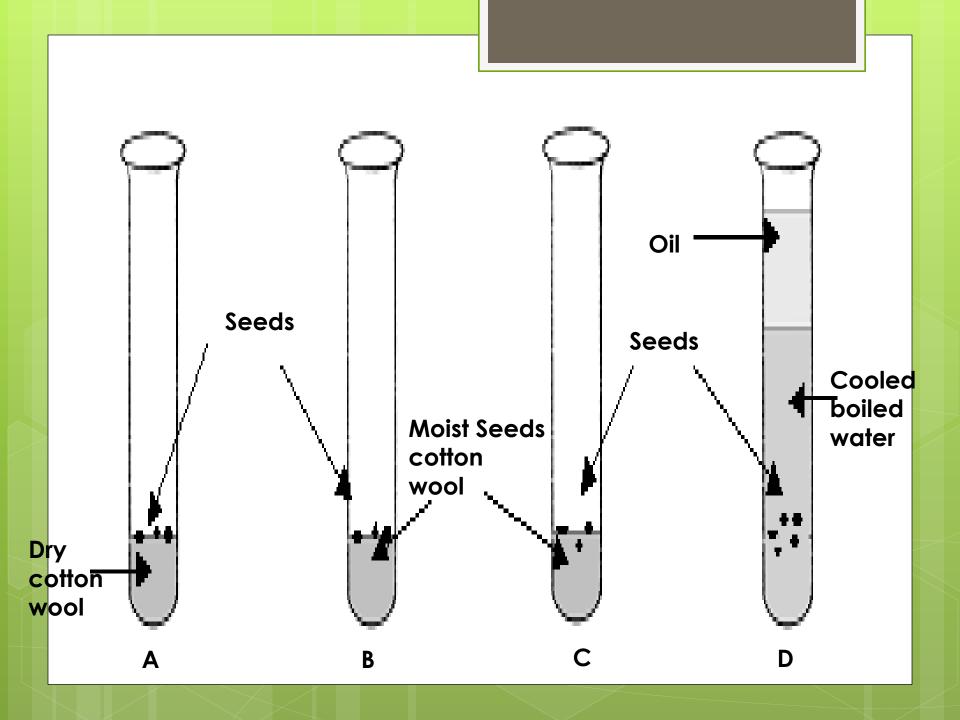
 Name the parts labelled A and B in the diagram.



- Write the letter A below the example on the right whose seeds are dispersed by animals.
- Write the letter W below the example on the right whose seeds are dispersed by wind.

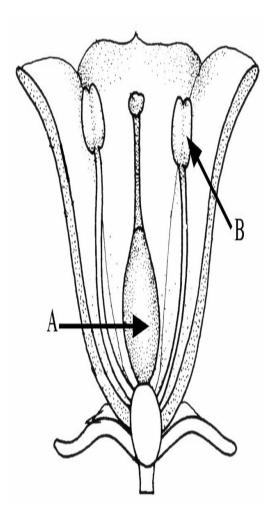


- Test tubes A, B, and D were kept in a warm place and test tube C was placed in a fridge.
- The seeds in test tube **B** germinated after 3 days.
- All of the other seeds failed to germinate.



- Why did the seeds in test tube A fail to germinate?
- Why did the seeds in test tube C fail to germinate?
- Why was cooled boiled water used in test tube D?
- Give two of the three conditions necessary for seeds to germinate.

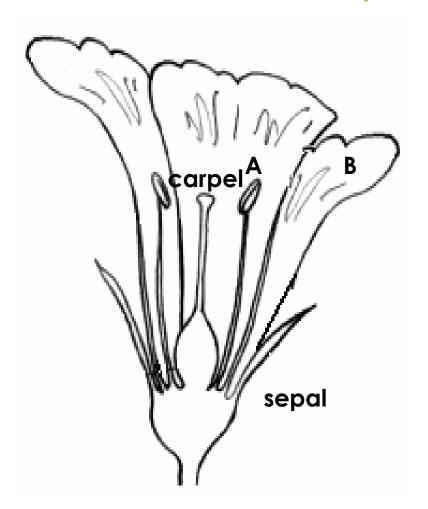
- Name part A of the carpel and give its role in the sexual reproduction of plants.
- Name part B of the stamen and give its role in the sexual reproduction of plants.



- Give a way in which the pollen from the flower of one plant can be transferred to the flower of another plant.
- Name the cell that is formed when a male gamete (sperm) and a female gamete (egg) combine.
- What does the cell formed by the fusion of the male and female gametes of a flowering plant grow and develop into?

Seeds need warmth,andtogerminate.

Carbon Dioxide Water Oxygen



Petal
Sigma
Stamen
Attracts insects
Pollination
Seed dispersal

- In the table write the letter A beside the name of the part labelled A.
- In the table write the letter B beside the name of the part labelled B.
- Write the letter F beside the function of the part labelled B.

- The child in the photograph is helping a dandelion to disperse its seeds.
- Why is seed dispersion important for plants?
- Give a second way, excluding wind, by which plants disperse seeds.



- Name a plant that can reproduce asexually.
- Describe the way the plant that you have named reproduces asexually.

- In the table on the right write the letter W under the seed that is dispersed by wind.
- Write the letter A under the fruit whose seeds are dispersed by animals.

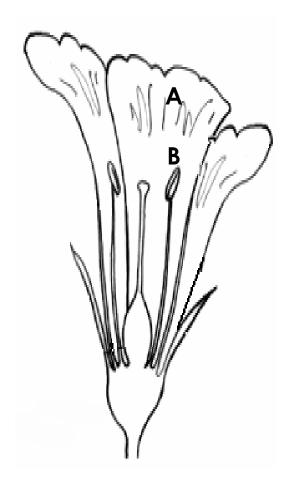


 List the 3 conditions required for seeds to germinate

Condition 1 _____
Condition 2 ____
Condition 3 ____

• Describe, using labelled diagrams in the box provided, an investigation to show that any two of the conditions that you have given are required for seeds to germinate. The investigation must have a suitable control

 Name the parts labelled A and B in the diagram of the flower.

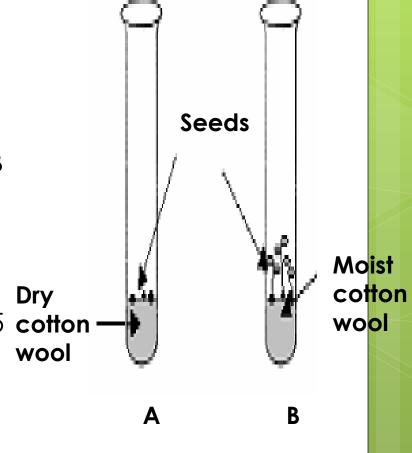


- A number of cress seeds were set up as shown in the diagram and left for a few days at a suitable temperature to investigate one of the conditions necessary for germination.
- The seeds in test tube B germinated.
- Study the diagram and answer the questions below using the table.

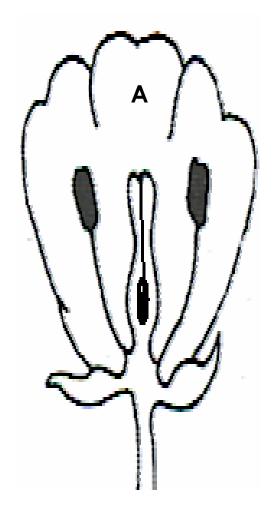
Air
Suitable temperature
Water
15°C
1 °C

 Write the letter X in the table beside the condition present in B but not present in A which allowed the seeds in B to germinate.

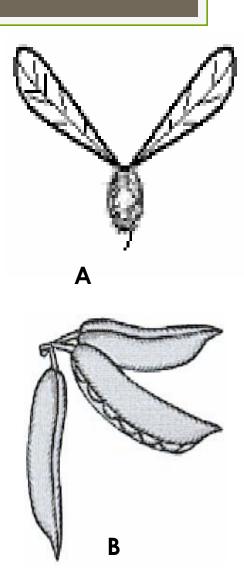
At which temperature, 1 °C or 15 cotton °C, would the seeds be most wool likely to germinate? Write the letter T in the table beside your choice



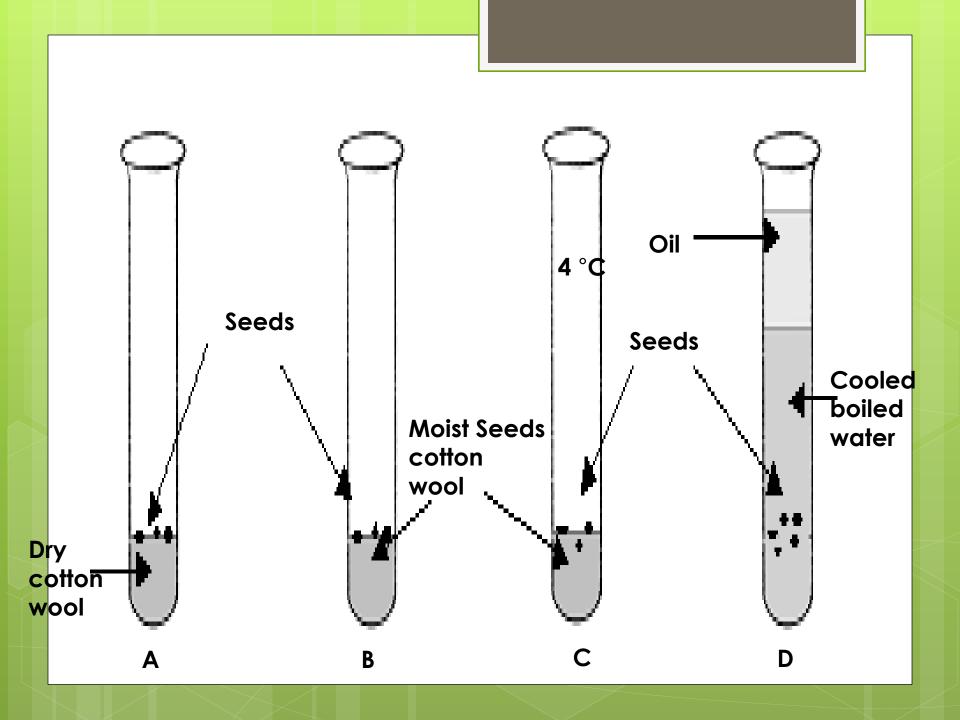
- Name the part of the flower labelled A in the diagram.
- Give **one reason** why insects are attracted to flowers.



- Identify how the seeds A and B in the diagram are dispersed.
- Name one resource that seeds must compete for with the parent plant



- A number of cress seeds were set up as shown in the diagram and left for a few days to investigate the conditions necessary for germination.
- Test tubes A, B and D were kept in the laboratory at room temperature.
- Test tube C was placed in the fridge at 4
 °C.



- Why do only the seeds in test tubes B germinate?
- Why is the water in test tube D boiled before use?
- **Explain** why the seeds in test tube **C** failed to germinate.
- Why is this investigation considered to be a "fair test"?