



**Our Vision:** Innovative education for a knowledge-based, pioneering, and global society.

**Department of Science 2018 - 2019**  
**Second Term: Worksheet 1**  
**Topic 1 Plants: L-1.6 Insects and flowers**

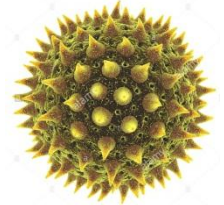
Grade 5.....

Name:.....

Date: ...../...../2019

**Q.1.** Fill in the blanks. Write: **pollination, pollen, nectar, stigma, spikes, anther**

- 1- In order for fertilisation to take place, first **pollen** from the anthers needs to get to the stigma of a flower.
- 2- **Anther** is a male part of flower and **stigma** is a female part of flower.
- 3- The movement of pollen from the anthers to the stigma is called **pollination**.
- 4- Pollen grains have little **spikes** which help them stick to the bodies of insects.
- 5- Some flowers produce sweet substance called **nectar**.



**Q.2. Match the following.**

- |   |                             |
|---|-----------------------------|
| 1- Bees use nectar to make                          | <b>3</b> colours and smells |
| 2- Sweet substance produced by flower               | <b>4</b> pollinators        |
| 3- Insects are attracted to flowers by              | <b>2</b> nectar             |
| 4- Birds, bees, butterflies, bats, slugs and snails | <b>1</b> honey              |

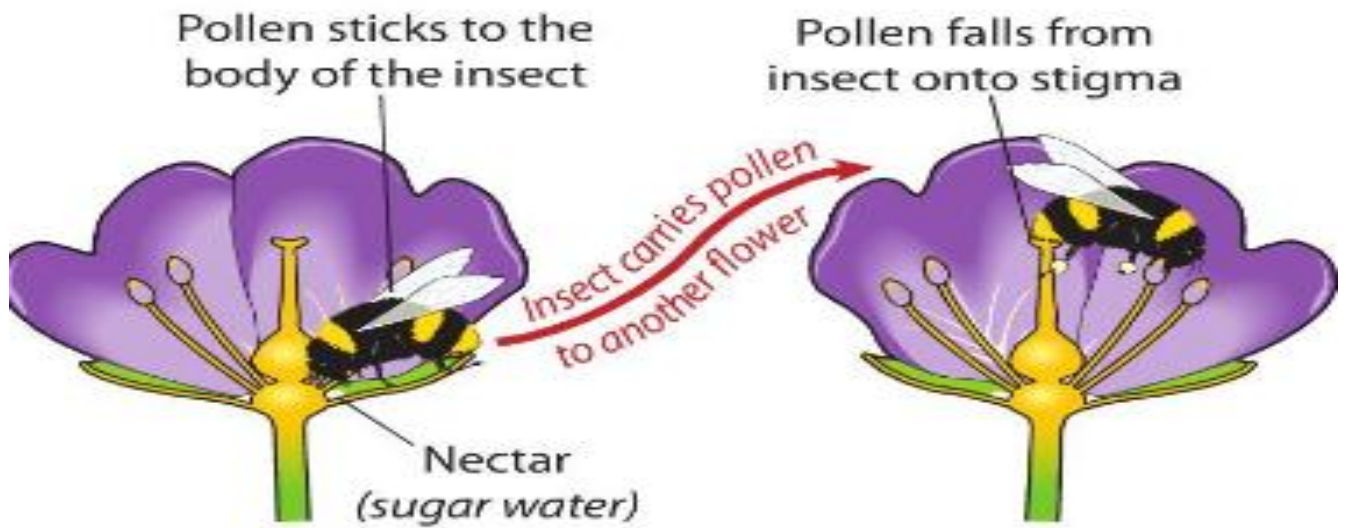


\*Bees, butterflies and other insects are good pollinators

The continuing fall in numbers of honeybees has shown the importance of insects pollinators not only in crops consumed by humans, but also to plants that support the ecosystem on which we depend.

**Q.3. The picture shows insect pollination. Write a few points to explain the process of pollination.**

### Insect pollination



**Insects such as bees are attracted to flowers and suck nectar.**

**Pollen from the anther sticks to the body of the bee.**

**The pollen from the bee falls on the stigma of the same or another flower.**

**Pollination takes place, which is followed by fertilisation.**

**This helps in plant reproduction.**

**Q.4. Fill in the table to sort these parts of flower into male and female parts.**

Carpel, stamen, filament, pollen, ovary, anther, ovum, stigma, style

| Female part: ..... <b>Carpel</b> .....                       | Male part: ..... <b>Stamen</b> .....              |
|--|---|
| <b>Stigma</b><br><b>Style</b><br><b>ovary</b><br><b>ovum</b> | <b>anther</b><br><b>filament</b><br><b>pollen</b> |

**Q.5. Differentiate between pollination and fertilisation.**

| Pollination   | Fertilisation   |
|---|---|
| <p><b>Transfer of pollen from the anther to the stigma of a flower is called pollination.</b></p> | <p><b>After pollination, the pollen grain on the stigma grows a tiny tube down the style to the ovary and unites with the ovum.</b></p> |

**Q.6. How and why do flowers attract insects and other animals?**



Colourful petals of a flower

Smell or scent of the flower

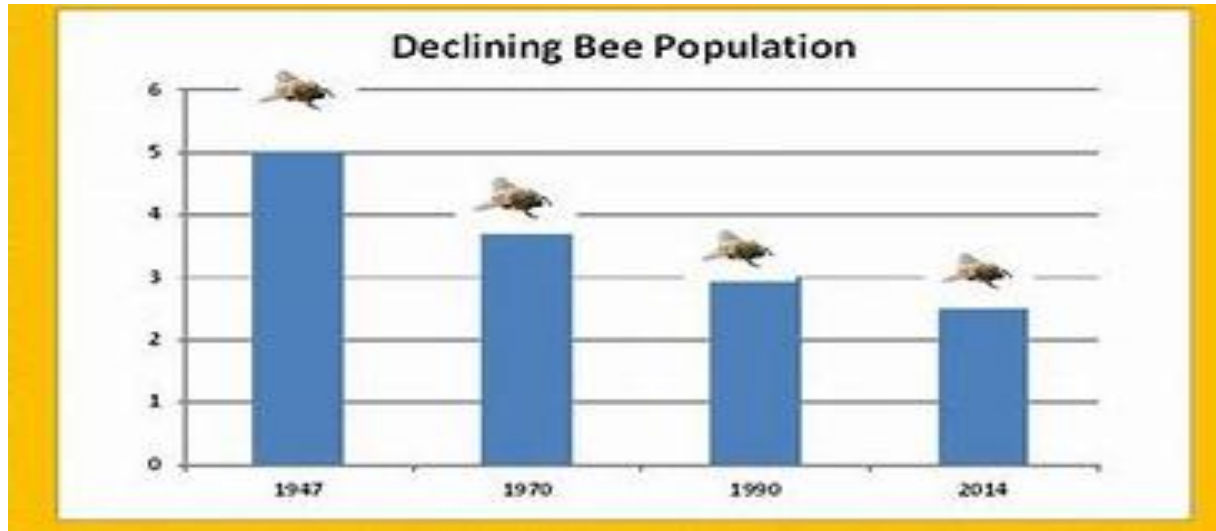
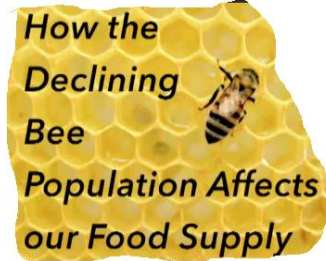
Flower produce sweet substance called **nectar**

Bees land on flowers to suck nectar. They are attracted by scent and colour of the flower. The bees store some of the nectar inside them. They fly back to the hive and use the nectar to make honey.

Bees go from flower to flower, and pollen grain stick to their hairy bodies some pollen grain rub off on the next flower as the bee travels to each one. This is called pollination.

## Decline in the bee population threatens food supplies

How the  
Declining  
Bee  
Population Affects  
our Food Supply



Bees and other insects pollinate plants that make the flowers that make the fruit we eat. If there are not many bees, less fruit is made. If there are lots of bees, more fruits are made. The number of honey bees is getting smaller. If bee numbers keep getting smaller, less fruit will be made. Fruit growers will suffer as they will not have fruit to sell.

Q.7. What do flowers do for bees?

**Flowers provide bees with nectar and pollen which worker bees collect to make honey and feed their colony.**

Q.8. What do bees do for the flowers?

**Pollination is needed for plants to reproduce, and so many plants depend on bees as pollinators. When bees collect nectar they help in the transfer of pollen on their bodies to the flowers.**