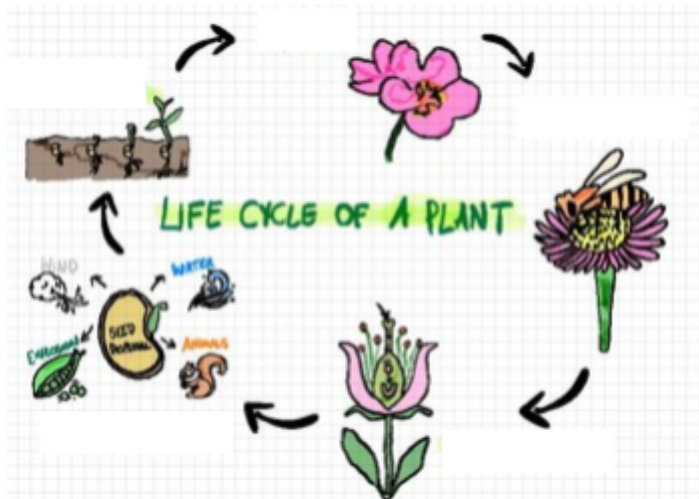


Flower Pollination

Name: _____ Block: _____ Date: _____

Life Cycle of Plants



Pollination is the transfer of _____ from one plant to another, resulting in _____, _____, and more _____.

- **Fertilization**: occurs when the _____ in the _____ unites with an egg.

Two types of pollination:

1. *Self pollination* - Transfer of pollen from the anther of a flower to the stigma of the _____ flower (or genetically similar).
2. *Cross pollination* - Transfer of pollen grains from the anther of one flower to the stigma of _____ flower.

Agents of pollination

Since plants cannot move, they must rely on pollinators to transfer pollen for them.

- To help ensure this happens, plants have characteristics that help pollinators locate the right flowers.
 - Include _____, _____, _____ and _____ of the flowers, as well as the _____.

What species aid pollination?

Some plants are pollinated by the wind. However, most angiosperms are pollinated by _____, _____, and _____. Many of these organisms eat **pollen** and **nectar** produced by flowers. As the pollinator travels from flower to flower in search of food, pollen is accidently **transferred** to another flower.

Why do animals pollinate plants?

- They get a REWARD: food! In exchange for moving their pollen to another flower
 - _____ – a sugary solution produced in flower glands called nectaries.
 - _____ – is high in protein, some bees and beetles eat it.

Types of Pollinators

Pollinator	Special Characteristic
<u>Wind</u>	<ul style="list-style-type: none"> • Pollinate small flowers with no _____ colors, special _____ or _____. • Release _____ amounts of pollen so that some pollen reaches stigma of other plants. <ul style="list-style-type: none"> ○ Hay fever is being allergic to the _____ in the air.
<u>Honeybees:</u>	<ul style="list-style-type: none"> • Excellent vision but cannot see the colour _____; can see _____, _____, and _____ best.
<u>Butterflies & Moths:</u>	<ul style="list-style-type: none"> • Butterflies can see _____ and _____ and _____ flowers <ul style="list-style-type: none"> ○ Flowers usually shaped as long tubes because of insect's proboscis – to get nectar. • Moth have good sense of smell and pollinate at night. Flowers usually _____ or _____, with sweet, _____.
<u>Flies & Beetles:</u>	<ul style="list-style-type: none"> • Flies like _____ smells and pale _____ colours (dull brown or purple). • Beetles pollinate flowers that are _____ in colour (dull white or green), but have very strong odor
<u>Hummingbirds:</u>	<ul style="list-style-type: none"> • Good sight; attracted to _____ and _____; poor sense of smell
<u>Bats:</u>	<ul style="list-style-type: none"> • Active at _____; attracted to _____, _____ odors.

Pollinator: Using the table above, answer questions #1-7 by stating which pollinator would be best suited for pollinating the flower.

1. The banana plant has a hanging flower that opens only at night and gives off a musty odor.
2. Skunk cabbage releases an odor like that of decayed meat.
3. Flower A is bright orange with little fragrance.
4. Flower B has small white flowers that open at night and produce sweet scent.
5. Flower C is bright yellow with nectar located close to its surface.
6. Flower D is bright red with nectar located in long tubes.

Type of pollination:

7. Which type of pollination is most random (wind or using a pollinator)? Explain your answer.
8. Do wind-pollinated or animal-pollinated flowers produce more pollen? Explain your answer.