WHY CARE ABOUT POLLINATORS?

CYBER SCIENCE CAMP

PLANTS NEED POLLINATORS

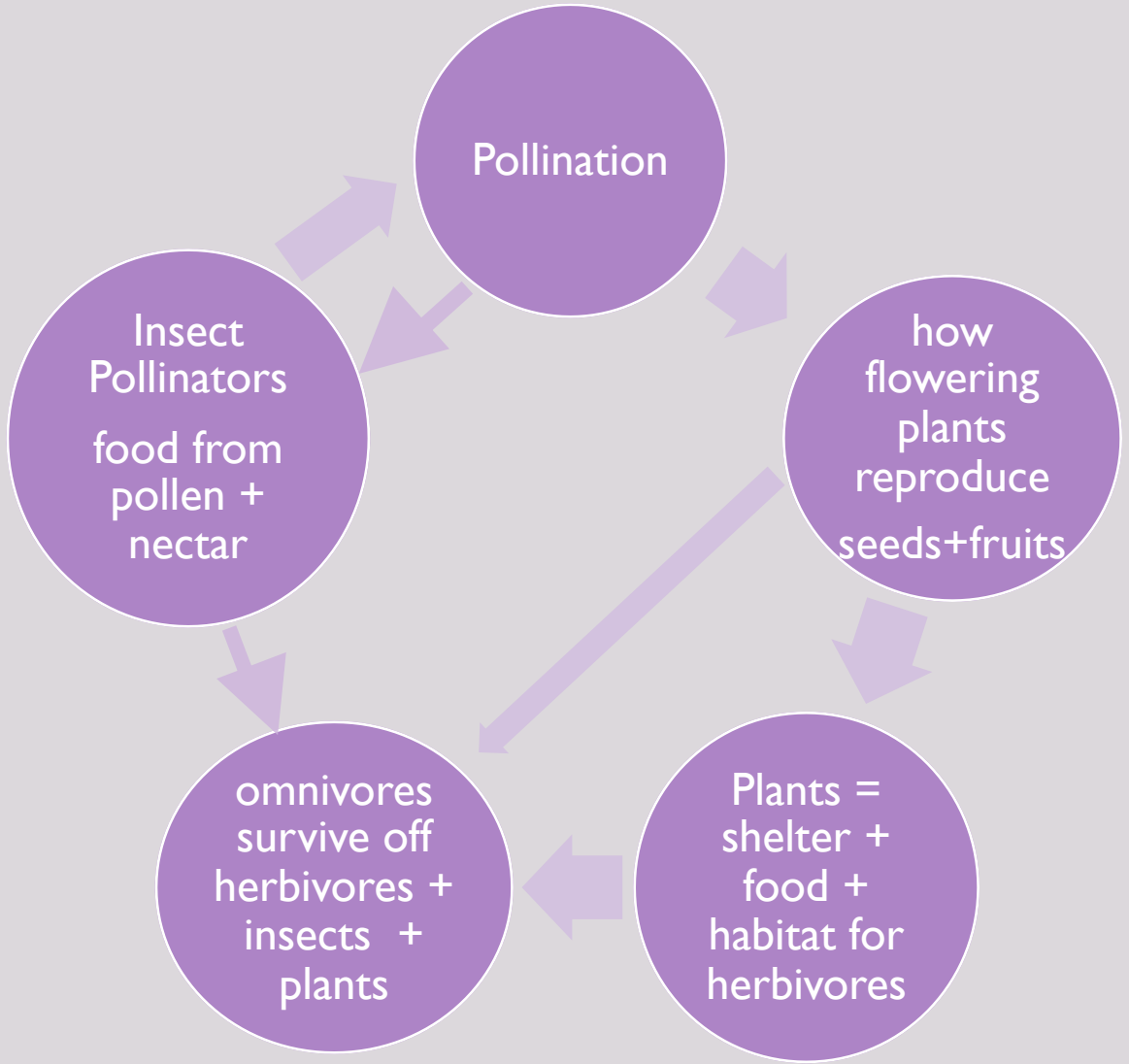
- Plants evolved to use flowers to attract insects to allow plants to reproduce.
- 300,000 plant species have been identified, 250,000 are flowering plants.
- 90% of all flowering plants require animal pollinators to make fruits & set seed.
- Pollination provides genetic diversity to plants.
- Plants can't move (they're sessile) so the rely on pollinators to disperse seeds.
- Climate Changes & Habitat Loss Have Negative Impacts on Plants
  - 91% of plants have experienced habitat loss & degradation
  - Over 16,000 plant species are Red Listed (threatened with extinction)

PEOPLE NEED PLANTS… THAT NEED POLLINATORS

- 1/3 of every bite you take comes from animal pollination - without pollinators, plants cannot produce the foods that we eat
- Examples of animal pollinated plants we eat daily:
  - Tomato, Eggplant, Beans, Peas, Squash, Peppers, Melons, Apples, Cucumbers, Peaches, Pears, Almonds
  - For a more complete list: https://pollinator.org/list-of-pollinated-food
  - Even dairy relies on animal pollination – most dairy cows eat Alfalfa, which relies on insect pollination form bees
  - List of Primary Sources: https://ento.psu.edu/pollinators/resources-and-outreach/what-are-pollinators-and-why-do-we-need-them

OTHER ORGANISMS RELY ON POLLINATION

- Wildlife mammals rely on animal pollination for ¼ of their diet.
- Many insects rely on plant pollen & nectar as food sources.
- Many pollinating insects are the base of the food chain for birds.
- Pollination is a key foundation of terrestrial food webs – without pollinators we simply cannot survive.



ECONOMICS OF POLLINATION

- 1 out of every 3 bites you take comes from animal pollination.
- Pollination contributes $217 billion to the global economy.
- Honey bees alone are responsible for about $5 billion in US Agriculture production.
- List of Primary Sources: https://pollinator.org/pollinators