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Your Observations

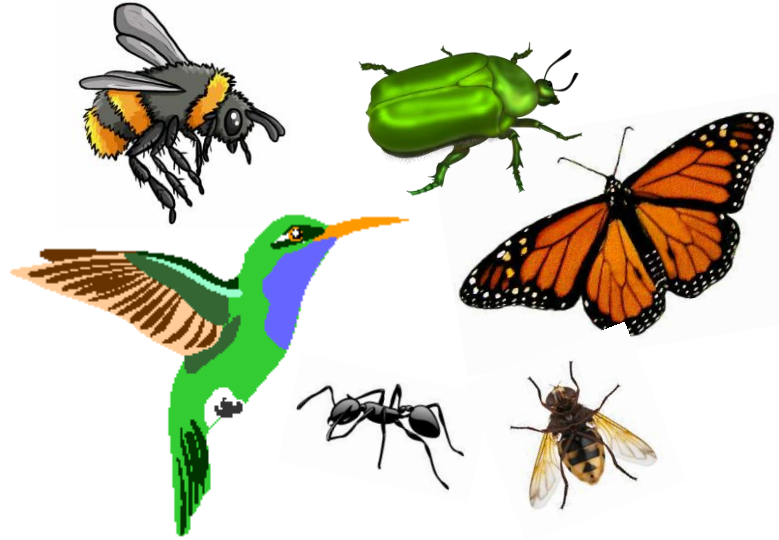
Date:_____ Time:_____ Location:_____

What pollinator did you see?_____

What was it doing?_____

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Pollinator Journal



Pollinator Discovery

Before you begin your pollinator adventure, put together a nature discovery kit! Below are some items you might want to include.

- | | |
|--|---|
| <input type="checkbox"/> Field Guides | <input type="checkbox"/> Binoculars |
| <input type="checkbox"/> Pen/Pencil | <input type="checkbox"/> Ruler |
| <input type="checkbox"/> Camera | <input type="checkbox"/> Dip Net |
| <input type="checkbox"/> Butterfly Net | <input type="checkbox"/> Nature Journal |
| <input type="checkbox"/> Flashlight | <input type="checkbox"/> Sketching Supplies |
| <input type="checkbox"/> Magnifying Glass | <input type="checkbox"/> Map |
| <input type="checkbox"/> Jar w/ holes in lid | |



Tips for Observing Wildlife

1. **Blend in with your surroundings.** Bright-colored clothes and/or smelly perfumes can alert wildlife.
2. **Keep still and wait.** If you find a good wildlife-watching spot, then sit down and be quiet. Loud noises can often scare wildlife away.
3. **Respect wildlife.** Most wildlife are best viewed at a distance, especially if you see a mother with its young.

Naturalist's Code of Ethics

1. **I will help to protect animals, plants and their environment.**
I will not disturb animals, their nests, feeding sites or places they need to survive.
2. **I will ask permission to view wildlife on private property.**
3. **When I am outdoors with others, I will be a role model.** I will share my knowledge of nature and will ask others to follow this code of ethic.
4. **I will try to leave the environment cleaner than I found it.** I will carry out my trash, food and tools.
5. **I will leave rocks, plants and wildlife as I find them for others to enjoy.**

I Pledge to Follow the Naturalist's Code of Ethics

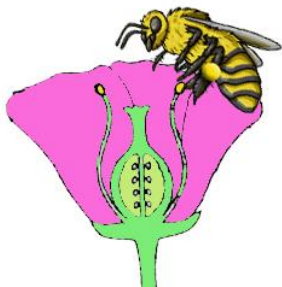
(Signed)

(Date)



Pollinator Facts

- One of out every 3 foods we eat and drink is a result of pollinators
- Flower flies are better pollinators than butterflies!
- Pollinators are important for the food web
- Bats, birds, and even some small mammals can pollinate
- Some plants have only 1 pollinator
- Chocolate and vanilla are both pollinated by animals
- A single blueberry bee can visit over 50,000 flowers in its life, creating up to 6,000 blueberries
- Pollinators around the world are declining



Put it in Poetry!

Haiku poetry is a short form of poetry developed in Japan centuries ago. The purpose of haikus is to tell a story that stirs emotion. Each poem has only 3 lines (5 syllables, 7 syllables and 5 syllables).

Find a nice quiet spot where you can observe a nature scene. Brainstorm your poem by writing down 6 to 8 sentences of different images that you see. Then, take two of the sentences that you think will create a picture and pare them down into 3 short lines.

**Be still and listen
as warblers sing up the sun.
The day starts anew**

First line= 5 syllables

Second line= 7 syllables

Third line= 5 syllables

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Fancy Flies

Did you know? Many flies are better pollinators than butterflies! Flies pollinate crops like chocolate. Often, flies are attracted to flowers that are blue, purple, or white. Can you find some flowers that flies may like?

Blue Flowers:

Purple Flowers:

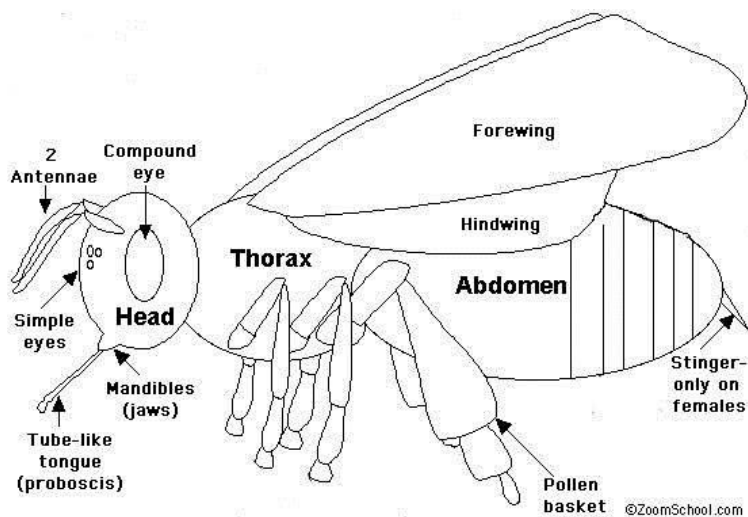
White Flowers:



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Bee Anatomy!

Bees are specially designed to find flowers and to carry pollen. Bees use their antennae and eyes to locate colorful flowers. As they land on the flower, pollen attaches to the hairs on their legs and bodies. Some bees have pollen baskets to catch pollen. Color the different parts of a bee!



What Foods are Pollinated by Animals?

Below are some foods that are pollinated by animals. Circle the ones that you like!

Fruit:

- Apple
- Apricot
- Blueberry
- Cherry
- Lemon
- Kiwi
- Mango
- Melon
- Orange
- Peach
- Pear
- Plum
- Raspberry
- Strawberry

Vegetable

- Asparagus
- Broccoli
- Cabbage
- Carrot
- Cucumber
- Eggplant
- Pepper
- Pumpkin
- Radish
- Squash
- Tomato

Other

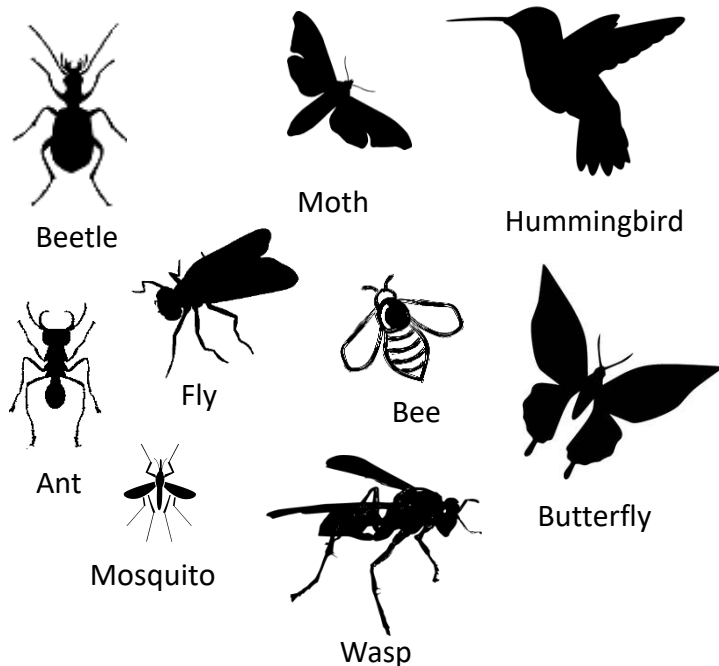
- Almond
- Chocolate
- Coconut
- Sunflower
- Walnut



What one food above can you not live without??

Who Pollinates Flowers?

To make a seed, pollen has to travel from one flower to another. Many flowers rely on animals to transfer pollen. Over 100,000 animal pollinators can be found worldwide! Below are some common pollinators.



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Pollinator Safari



- ☐ Ant
- ☐ Beetle
- ☐ Bumble Bee
- ☐ Butterfly
- ☐ Caterpillar
- ☐ Flower Fly
- ☐ Honey Bee
- ☐ Hummingbird
- ☐ Mosquito
- ☐ Moth
- ☐ Wasp
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

Go explore and find pollinators!

local

What was the coolest pollinator that you found?

Why was it so cool?

How many body parts does it have? _____

How many legs? _____

Does it have antennae? _____

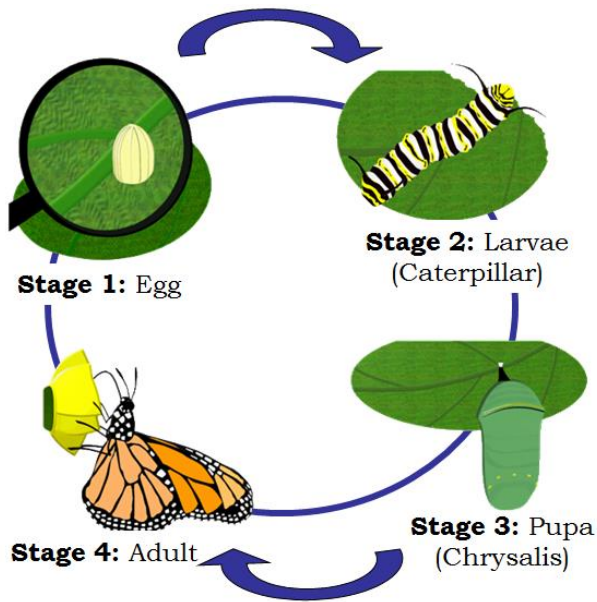
What was it doing? _____

Other Notes:

Date: _____ Time: _____ Location: _____

Monarch Lifecycle

Did you know butterflies, bees, and moths all go through metamorphosis? Metamorphosis is a process some animals go through to become adults. It is a series of physical changes. Butterflies, for example, start as eggs that hatch into caterpillars. Caterpillars then pupate and turn into butterflies!



For more info on Maryland butterflies, go to:
dnr.maryland.gov/wildlife/Pages/plants_wildlife/butterfliesofmaryland.aspx

Be(e) a Friend to Pollinators!

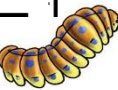
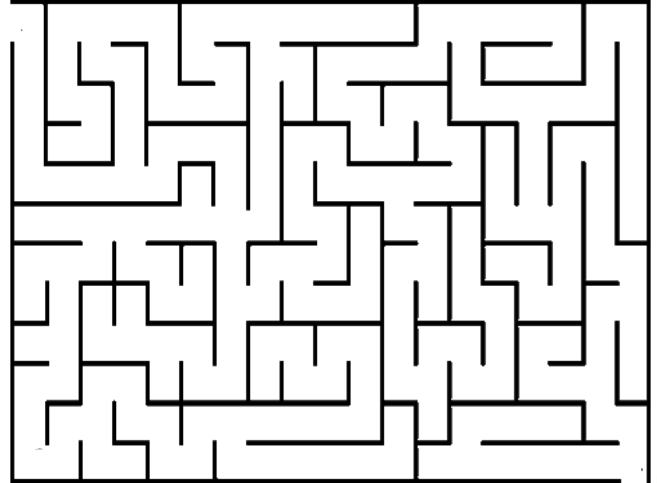
You can help pollinators with these 5 easy steps!

- 1)Feed the bees!** Plant a garden with native flowers for pollinators at your home and at your school.
- 2)Don't use poison sprays!** Bug your family to stop using sprays in the garden. Many pesticides can hurt bees, butterflies, and other important pollinators.
- 3)Be kind to pollinators.!** Many pollinators are fragile- be gentle and quiet when they are near.
- 4)Protect habitat!** Help pollinators by keeping their habitat safe.
- 5)Bug someone!** Teach your family and friends why they should help pollinators too!



Food Web Maze!

Did you know many pollinators are important food for other animals? A single family of chickadees needs over 6,000 caterpillars to raise their babies! Help the momma chickadee find the caterpillar!



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Flower Quest!

Describe a flower you have found:

What color is it? _____

Does it have a smell? _____

Draw your flower below. Who do you think pollinates it?

Date: _____ Time: _____ Location: _____