WILDFLOWER GROWTH CHART

Name: _____

After your seeds germinate, use a ruler to measure them. Record your other observations.

Date I planted the seeds._____

How much did your seedling grow in one week?

Date	Height (inches)	My Observations
Example: June 2020	2 inches	My seedling has 2 new leaves.

GREENPOINT COMMUNITY ENVIRONMENTAL FUND

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NATIONAL WILDLIFE FEDERATION: POLLINATOR PLANTING KIT

GROWING A POLLINATOR GARDEN

Dear students and families,

This pollinator activity will help you learn about and take action for butterflies, bees, and birds from home. Pollinators can thrive if we protect and create the habitat they need—native flowering plants, clean water, and places to rest and nest.

Pollinators can thrive in cities if we protect and create the habitat they need—native flowering plants, clean water, and places to rest and nest. Thanks for growing a wild community!

Create a Pollinator Patch

Buy or collect seeds that are a mix of wildflowers or sunflowers. They provide nectar and pollen (food) for bees, butterflies, and hummingbirds. Follow the instructions below to get started. Some plants may flower next year—be patient; they will spend this season developing strong root systems and will return next year.

How to Germinate Seeds

Materials

Coir pellets (growing media)

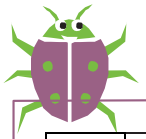
Seeds

A dish or container

Water

1. Place the coir pellets in a shallow container or on a dish to prevent water from leaking on furniture or surfaces.

Name:_____ Date:_____



Closely observe flowers in your neighborhood or from a window to see if pollinator visit them. **Record your observations.**

Date	Pollinator	How Many?	Where?	What was it doing?
Total number of pollinators observed.				

Observe two pollinators for a few minutes. Sketch or describe them below. Can you identify the species?

Pollinator #1	Pollinator #2

What questions do you have about these pollinators?

I wonder....

Sow More Seeds

Use the remaining seeds to create more pollinator habitat.

- Sow the seeds directly on the ground or in a planter, according to the directions on the packet. Water often and watch them grow!
- Make seed balls! Use two parts clay, one part compost or soil, and one part seeds. Blend the materials together and shape them into a ball. Plant or toss them in a sunny spot! Find instructions here: www.birdsandblooms.com/blog/easy-gardening-idea-creating-seed-balls/
- Share some seeds with a friend or neighbor!

Visit Pollinators in Your Neighborhood

Where might pollinators visit in your neighborhood?

- Check out your local park and try to identify areas where pollinators would gather.
- Are there green spaces at your school or in your neighborhood that attract insects and pollinators? Notice them next time you pass by.
- Hidden places like sidewalks, sides of the road, and landscaping near a store can host pollinators.

Community Science

Learn more about pollinators and share your observations on a community science platform.

- Bumble Bee Watch | www.bumblebeewatch.org/
- iNaturalist | www.inaturalist.org/
- Monarch Watch | www.monarchwatch.org

2. Gently pour warm water onto the coir pellets to rehydrate them. This can take several minutes; add more water if necessary.

NWF

3. Place 1-2 seeds on top of each coir pellet. It is not necessary to bury them in the coir mix.

©Marys Heirloom Seeds

4. Water every day. The coir mix should be kept evenly moist like a sponge, not soaking wet.

5. Wait patiently for the seeds to germinate. Check them every day to look for signs of growth. Record your observations in the growth chart.

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6. Thin out the seedlings. There won't be enough room for more than one plant to develop in the small coir container. Choose one seedling to keep and cut the rest to the base of the soil.

7. Place the seedlings in a sunny location.

*Note: The coir pellets are a sustainable growing material made of coconut fiber. They will expand when water is added to them.

How to Transplant Seedlings

Materials

Seedlings

Planting container (planter, window box, or upcycled

Potting soil (can be purchased inexpensively from a hardware or dollar store)

1. Select a container to transplant your seedlings or upcycle a household container and prevent waste from going to a landfill! Milk cartons, yogurt containers, old newspapers and toilet paper rolls work well. Be sure to make holes in the bottom so water can drain—*ask an adult to help you.*

Right: ©campstevensjulian.wordpress.com tinyurl.com/y8nvyw5s

2. Fill your container with potting soil. Make a hole in the soil about the depth of the coir container. Carefully place the entire coir container in the hole and gently fill the hole with soil.

Coir Container Depth: approx. 2-3" tall

Top: NWF

Bottom: ModernHomestead

Bees are the most effective pollinators. They can visit thousands of plants in a single day. The United States is home to over 2,000 native bee species! Many other animals also pollinate plants, including butterflies, moths, wasps, flies, ants, birds, and bats. Below, find four common pollinator species that are commonly found across wide portions of the United States.

Bees

Bumble Bee

- I am a common native bee and important pollinator in most areas of North America.
- My buzzing behavior (sonicating) is required for certain flower pollination to occur.

Karen Chase

Hummingbirds

Ruby-Throated Hummingbird

- I am capable of beating my wings more than 50 times a second.
- I use my thin beak and long tongue to drink nectar from flowers.

Randy Streufert

Bats

Lesser Long-Nosed Bat

- I am a migratory nectar bat found in the Southwest.
- I use my long tongue to gather nectar stored at the bottom of flowers of the agave, saguaro and organ pipe cacti.

USFWS

Beetles

Red-Necked False Blister Beetle

- I am a pollen-feeding beetle.
- I use a toxic chemical as a defense mechanism. One should be careful when handling me for closer catch and release observations.

Beatriz Moisset

MEET THE POLLINATORS

Pollinators—insects and animals that move pollen from one flower to another—are essential to ecosystems and fascinating to study. When pollinators visit a flower to eat nectar and pollen, pollen grains stick to their bodies which they transfer to the next flower they visit and helps the plants reproduce.

Butterflies

Monarch Butterfly

- In my larval stage I feed exclusively on the leaves of native milkweed.
- I can travel hundreds even thousands of miles during my two week lifespan.

Mandy Dickinson

Moths

Hummingbird Sphinx Moth

- My coloration and behavior sometimes leads people to think I'm a hummingbird or a bumble bee.
- I beat my wings rapidly and have a wingspan of 4 to 5.5 cm.

Jeff Kudia

Wasps

Great Golden Digger Wasp

- I am not an aggressive wasp species. I stay focused on sipping nectar from flowers.
- I nest in various types of wood and feed on nectar.

Mark Brinegar

Flies

Syphrid Flower Flies (Hoverflies)

- I am often seen hovering or nectaring at flowers.
- I am often mistaken for a wasp or bee.

Robert Webster

TRANSPLANTING SEEDLINGS

3. Place your plant containers in a sunny location like a windowsill or stoop.

NWF

4. If you're transplanting your seedling directly in the ground, dig a hole in soil about the depth of the coir. Place the entire container in the hole and gently fill the hole with soil.

NWF

5. Water your seedlings regularly to help them get established. Watch them grow!

Mary's Heirloom Seeds

THE POWER OF POLLINATORS

Pollinators are vital to life on Earth. Plants and pollinators have co-evolved over millions of years. Flowers provide pollen and nectar for pollinators to eat. Pollinators transfer pollen from flower to flower, which helps plants reproduce. The seeds and fruits formed after pollination feed both people and wildlife. Consider a pollinator's place within a food web: what would happen if there were no pollinators?

Pollinators are essential to PLANTS.

Pollinators aid the reproduction of over 85% of flowering plants.

Pollinators are critical to WILDLIFE.

Pollinators help plants produce seeds, fruits, and nuts, which wildlife needs to survive.

Pollinators are vital to PEOPLE.

Pollinators are responsible for 1 in 3 bites of food we eat.

