

# Listening



1. Find a place to sit.
2. Close your eyes and listen carefully to all the sounds you can hear. Cup your hands around your ears and turn your head to help you listen in particular directions.
3. Listen for as long as you can.

## THEN

- Draw a map of where the sounds came from, in relation to where you're sitting.
- Try to identify what made each sound you heard. Can you see it from where you're sitting? How do you know it made that sound?

## Did you know?

Sound is a vibration that moves through the air. It can also travel through water or other things.

Crickets can hear using their legs; sound waves vibrate a thin membrane on the cricket's front legs.

Dolphins and bats use echolocation. They make sounds and listen to the echo to detect movement and locate object with sound.

# The Air



- Observe and describe how different things are affected by the air. Look at plants, animals, and objects. Is there any wind?
- Now close your eyes and try to picture the air. Draw what you think it looks like.
- List all of the ways you can think of to prove the air exists.
- How many ways can you sense the air?

## Did you know?

Almost all living things need air to survive.

Warm air expands and rises up while cold air condenses and sinks lower.

Air is a mixture of different gases that covers the Earth in a layer over 400 miles high. This layer is called the atmosphere.

The atmosphere contains 78% nitrogen, 21% oxygen, and smaller amounts of other gases.

# As You Walk: Textures

- Texture is how the surface of something feels. Observe and describe all the different textures you can find. Try feeling walls, paths, and fallen leaves, sticks, or seeds.
- Draw the shapes of those textures.
- Close your eyes and have someone carefully lead you to an object. Gently feel the texture of it and describe what you are feeling.

# All Your Senses

- Find a place to sit quietly where you can see a plant or animal. Use all the senses you can to observe it from your spot. If there's a sense you can't use, imagine what it would be like if you could.
- Make a list of things you wonder about your plant or animal.

## Did you know?

Each eye of a fly has 3,000 lenses!  
Each of your eyes has only one lens.

Phytoplankton (a microscopic living thing that conducts photosynthesis, like plants do) can sense when a predator is eating nearby through a chemical scent.

The skin is your body's largest organ and contains more than 4 million sensory receptors.

Plants can sense sunlight and move towards or away from it.

# Animal Homes



- Look for places that offer food, water, a place to rest, and shelter.
  - Where would you stay overnight if you were a migrating bird passing through the gardens?
  - What if you were a butterfly trying to get out of an afternoon rain storm?
  - What if you were a squirrel getting ready to settle in for the winter?
- Draw each home you chose. Explain the reasons why you chose each one.

## Did you know?

Animals need homes to provide shelter and protection from predators and weather.

Hermit crabs use abandoned sea shells as mobile homes and protection.

An eagle's nest is called an eyrie.

People make homes out of many materials such as concrete, clay, wood, mud, sticks, and hay straws.

# As You Walk: Smells



- Observe and describe all the different smells you come across.
- Try to identify their sources. Does it smell more in one direction than another?
- Explore how far smells travel. How far away can you be from a smell's source and still smell it?

# Differences



- Find a place where you can observe two garden areas that are different from each other, like a mowed lawn, garden bed, pond, or wooded area. Closely observe the plants in each area.
- What are all the ways they're different from each other? You can use numbers, words, and drawings to record your observations.

## Did you know?

Deciduous trees lose all their leaves in the fall, while evergreen trees do not lose their leaves or needles over winter.

Redwood trees can grow more than 350 feet tall. The Dwarf Willow is the smallest tree in the world with a height of up to 3 inches tall.

Red maples have a native range from southern Canada to Florida. Red maples in different parts of this range thrive in very different conditions.

# Blooming Plants



- Sit close to a plant that's blooming.
- Make a detailed sketch of the whole plant. Pay attention to the sizes, shapes, locations, and numbers of its parts. How tall is it? What colors is it? What shape are the leaves? How many petals does it have? Is there anything unique about this plant? What else do you observe?

## Did you know?

Flowers produce nectar that is eaten by many insects and even hummingbirds.

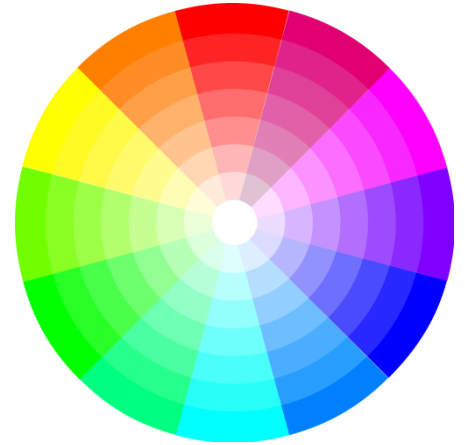
A sunflower looks like one large flower, but each head is composed of hundreds of tiny flowers called florets.

Flowers did not always exist: they first appeared 140 million years ago. The first land plants evolved about 700 million years ago.

# As You Walk: Colors



1. Pick a color.
2. Count how many times you see it as you walk.
3. When you see your color on a plant, record the name of the plant or make up your own name for it (or both!).
4. Also look for any animals or structures that have your color in them.



## Birds



- Find a place with more than one bird (a bird feeder is a great place). Sit very still and quiet somewhere you can observe the birds.
- Observe the birds' activity. Try to figure out why they're acting the way they are. If you were that bird, why would you do those things?
- Describe what their calls and songs sound like with words or syllables. Try to imitate the sounds the birds make. How do the birds react to your calls?

### Did you know?

You can identify birds by their sounds. Some people say the Carolina Wren's song sounds like "teakettle."

Birds have hollow bones which help them fly.

Owls can turn their heads in almost a complete circle but they cannot move their eyes.

Birds are social animals and work together in breeding, flocking, and hunting.

# Connections



- Sit somewhere you can observe different plants and animals interacting with each other.
- What living things do you see? How are they interacting? Can you think of ways they're connected?
- Search for something that's decomposing, like a dead leaf or branch from a tree. Can you imagine it as a home or food for something? What do you think will happen to the thing you found after one month?

## Did you know?

Earthworms consume decaying vegetation and small particles of organic matter from the soil. Their primary diet is leaf litter.

The world's largest flowering plant, called Rafflesia, is parasitic, living inside tropical trees.

Pollinators like honey bees eat the nectar that flowers produce. As they move from one flower to another, they pollinate the flowers so plants can make seeds.

# As You Walk: Shapes



- Choose a simple shape (like a circle or rectangle).
- Count how many of it you see. Look closely for your shape in plants, structures, and paths.
- Pick a plant and draw it using simple shapes.

