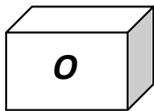


Ways to Learn, Explore and Play Inspired by Nature

Move like an animal: HOP like a frog, *flap your arms as fast* as a hummingbird, *slither* like a millipede. What other animals can you mimic?



Make a mystery box by cutting a hand-sized hole in the side of a shoebox. Place objects inside the mystery box to explore them with your sense of touch –no peeking!

Research: Scientists, engineers, architects, and others use BIOMIMICRY, imitating nature to solve complex human problems. For example, the design of the bullet train's nose was inspired kingfishers' beaks. Find other inventions inspired by nature?



Collect flowers, twigs, pine cones, and other items from nature. Use string or yarn to tie them to a twig or piece of bamboo to make a mobile.



Make a map of an outdoor area. What will you put on your map? Paths? Gardens? Buildings? The terrain? The route you take to walk through the area? Other things?

Research: Which natural objects are water repellent? Which absorb water? Why? (Example: lotus leaves have great water repellency. Why do you think that is?)



Look for different shades of **RED** and write a short poem about what you see. Choose a different **COLOR** that you find outside and write another poem about what you see.

Find two leaves.



Describe how they are similar and how they are different.

Design a **FLOWER** and give it a name. How many petals will it have? What shape will the petals be? What color? What other parts of the flower will you add? Can you draw the flower? Can you describe the flower in words?



Quietly, stand in a garden and close your eyes. What do you hear? What do you smell? Do you feel anything on your skin? How do you feel inside your body?

Look all around you. Who do you think



Can you find evidence of an animal's home? lives there?

Choose a plant or animal that you can see outside. Describe its characteristics. Think about what it might look like in a different season of the year. What would it look like then?

Summer
Fall
Winter
Spring



Insects and animals eat plants. If you were a plant, how would you adapt to being eaten by insects or animals in the garden?

Make pretend **BINOCULARS** with your hands. Look through them to focus on a plant in the garden. What do you see? Make one of the shapes you see with your body.

What do you think would happen if you planted a tulip bulb upside down?



Look out of your window or walk outside. Look carefully. Can you observe something right now that you have never seen before? If so, what is it?

Find a garden near you. Look carefully at it.  If you could add something to the garden, what would it be? Can you draw a map of the new addition to the garden?

PRETEND to be a seed waking up and becoming a plant. Act out the motions.

If you were a raindrop



falling from the sky, what path would you take through the garden?



Close your eyes and listen to the sounds of nature. Describe the sounds that you hear. Can you tell which direction the sound is coming from? Can you draw a map labeling the sounds you heard in the directions you heard them?



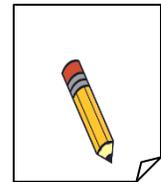
Go to a spot that interests you. Observe the nature in this area closely. Design a travel brochure that will bring others to your spot.

Choose an outdoor area. Search the area to find the largest plant and the smallest plant. Examine each one closely. Make a list of your observations for each. Compare your lists and note what is different? What is the same?



Find something outdoors to observe. Pretend that you are a scientist and describe it using numbers and measurements. [3", 7"] Then pretend you are a writer and describe it using adjectives. [*flowing leaves*]

Find an area that you consider to be beautiful. Observe it carefully. Then sketch a small part of this scene without looking at your paper and pencil. How did this method help you to observe more detail?



Research: Can you find a plant that could be **USEFUL** to you? How would you do this? What part of the plant would you use? How would you use it?