Kindergarten
- Practice using your sense of sight, sound, touch, and smell. Practice “deer ears” with hands cupped over the ears and “owl eyes” – expanding your field of vision
- Practice your sense of hearing by doing a “sound map” or a birds-eye view of sound. Mark an “x” in the center of a piece of paper to represent where you are and place a dot or symbol every time a sound is heard in the approximate location that it occurred.
- Observe and compare 2 different kinds of trees, using the senses
- Observe, draw, and compare the shapes of leaves from different kinds of trees
- Search for, observe, draw, and compare two birds found in the schoolyard
- Lay on your back and watch clouds at different times of year. Draw and compare the different types of clouds.
- Go on a search of the schoolyard and look for objects that are made of wood
- Find all the parts of a tree life cycle: cone or seed, seedling, sapling, mature tree, snag, rotting log.

1st grade
- Go on a scavenger hunt, looking for insects and bugs in various locations. Compare the number and type of insects found in several different habitat types (under logs, under leaves, in soil, on asphalt, etc).
- Collect insects and observe variations in groups of insects
- Adopt a plant and observe changes in different parts of the plant through the seasons
- Look for evidence of insects in the schoolyard. Record observations with pictures, numbers, or written statements.
- Use Q-tips or cotton balls to simulate bees to study pollination. When flowers are present, have students gently brush their “bees” against the pollen and then tap their bee over black paper. Have students observe the pollen with a hand lens and record what they see with drawings.
- Gather a collection of rocks from the schoolyard and make observations about physical characteristics of rocks
- Use various screens to have students practice sifting a cup of earth material
- Build parachutes and observe their movement in different parts of the schoolyard (next to the building, in an open field, etc.)
- Use a hand lens to go on a “micro-hike” on your hands and knees, exploring the world at a small scale

2nd grade
- Record temperature, precipitation, and other weather patterns daily or weekly over several months. Record observations on a weather calendar and graph the change over the months.
- Record air temperature outside every hour and graph the change over the course of a day
- Compare air temperature in the sun and in the shade.
- Adopt a plant in the schoolyard and take observations over several seasons. Draw a concept map of their plant connecting to different parts of the ecosystem.
- Write stories from the perspective of a plant.
3rd grade
• Go on a scavenger hunt looking for seeds and fruits in the schoolyard. Make observations of the seeds and record the size, number of seeds per fruit (or cone), and a drawing.
• Gather a collection of seeds from plants in the schoolyard and predict what the method of seed dispersal is for each one (wind, water, animal, etc.)
• Pour water onto various surfaces and slopes outside and make observations about how the water moves and is absorbed.
• Bring containers (same size and amount of water) outside and put one in the sun and one in the shade. Record the temperature of the water in each container over several hours.
• Learn about your favorite animal in Central Oregon and practice walking like your animal. Learn the animal’s gait and try to mimic the gait as close as possible.

4th grade
• Investigate the composition of soils from four different locations. Observe and compare local soils based on color, texture, and depth.
• Find examples of erosion and deposition in the schoolyard (great after a rainstorm)
• Simulate erosion using water on different slopes and surfaces. Record and draw how and where water moves.
• Plan a simple investigation about the behavioral adaptations of animals (examples: record the amount of bird chirping at various times of day or at different times of year; record the amount of squirrel and/or chipmunk activity at various times of day or at different times of year; record the amount of bird and/or mammal activity at different habitats within your schoolyard)
• Conduct a simple study observing the plants found in different schoolyard habitats

5th grade
• Have students design an investigation on how abiotic factors influence biotic factors in an ecosystem. Examples of questions are: How does the amount of light (in open sun or in shade) affect the plant community, how does soil type affect the plant community, etc.)
• Demonstrate plant transpiration by putting large plastic bags over plant leaves (this works best on warm days) and measuring the amount of water that evaporates into the bag. Compare transpiration rates between species or weather conditions.
• Find a stump that’s been cut down and count and observe the tree rings. Locate periods of drought (small, tight rings) and periods with more moisture (wide rings) and record when they occurred (counting backwards from the current year (outermost ring)
• Go wildlife tracking in the snow.
• Research an animal that might live in your schoolyard and record what the habitat requirements (food, water, shelter, space) are for that animal. Then, conduct a habitat assessment of your schoolyard to predict whether your schoolyard has potential habitat for that animal.
• Draw a foodweb for your schoolyard or NatureHood, starting with the sun’s energy.
• Draw a map of the NatureHood and have students identify and label different habitat types (i.e. ponderosa forest, grassland, lawn, juniper shrub-steppe, urban, etc.)
• Identify different habitats in your schoolyard and do a vegetation study for each one. This can occur in a 1x1m plot or a 10x10 ft plot, depending on the habitat type. Measure and record species present, dominant species, tree diameter (if there are trees), and any other information.