

Water Discovery Field Trip Program Activity Stations & CA Science Standards

Kindergarten

Activity Station: Water Cycle Bracelet Game

1b Students know water can be a liquid or a solid and can be made to change back and forth from one another.

Activity Station: Bird Bingo, Nature Walk

2a Students know how to observe and describe similarities and differences in the appearance and behavior of plants and animals.

3a Students observe common objects by using five senses.

Grade One

Activity Station: Water Cycle Bracelet Game

1a Students know solids, liquids, and gases have different properties.

1b Students know the properties of substances can change when the substances are mixed, cooled, or heated.

Activity Station: Bird Bingo, Nature Walk

2a Students know different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.

2b Students know both plants and animals need water, animals need food, and plants need light.

2c Students know animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.

2d Students know how to infer what animals eat from the shapes of their teeth (e.g., sharp teeth: eats meat; flat teeth: eats plants).

2e Students know roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight.

4b Students will record observation and data with pictures, numbers, or written standards.

Grade Two

Activity Station: Bird Bingo, Nature Walk

2a Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.

2b Students know the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice.

4c Students will compare sort common objects according to two or more physical attributes (e.g. color, shape, texture, size, weight).

Activity Station: Water Cycle Bracelet Game

3e Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.

Activity Station: Pond Life Microscopes

4e Students will write or draw descriptions of a sequence of steps, events, and observations.

4f Students will use magnifiers or microscopes to observe and draw descriptions of small objects or small features of objects.

4g Students will follow oral instructions for a scientific investigation.

Grade Three**Activity Station: Water Cycle Bracelet Game**

1e Students know matter has three forms: solid, liquid, and gas.

1f Students know evaporation and melting are changes that occur when the objects are heated.

Activity Station: Bird Bingo, Nature Walk

3b Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands, and wetlands.

3c Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms, and some are beneficial.

Activity Station: Enviroscapes®

3d Students know when the environment changes, some plants and animals survive and reproduce; others die or move to new locations.

4d predict the outcome of a simple investigation and compare the results with the prediction.

Grade Four**Activity Station: Wildlife Observation Study, Nature Walk**

2a Students know plants are the primary source of matter and energy entering most food chains.

2b Students know producers and consumers (herbivores, carnivores, omnivores, and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem.

3b. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.

6a Students will differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations.

Activity Station: Pond Life Microscopes Study

2a Students know decomposers, including many fungi, insects, and microorganisms, recycle matter from dead plants and animals.

3d Students know that most microorganisms do not cause disease and that many are beneficial.

6f Follow a set of written instructions for a scientific investigation.

Activity Station: Enviroscapes®

5a Students know some changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions, and earthquakes.

5c Students know moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weathering, transport, and deposition).

Grade Five

Activity Station: Pond Life Microscope Study

2a Students know many multicellular organisms have specialized structures to support the transport of materials.

6a Students will classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.

Activity Station: Water Testing

3a Students know most of Earth's water is present as salt water in oceans, which cover most of Earth's surface.

3b Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point.

3c Students know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet, or snow.

6d Students will identify the dependent and controlled variables in an investigation.

Activity Station: Envirosapes®

3d Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.

3e Students know the origin of the water used by their local communities.

Activity Station: Edible Aquifers

3d Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.

6d Students will identify the dependent and controlled variables in an investigation.