

Plants 201 Relevant Washington State Science Standards, 2009

2-3 INQA Question: Students know that: Scientific investigations are designed to gain knowledge about the natural world.

2-3 INQC Infer: Inferences are based on observations.

2-3 INQD Investigate: Simple instruments, such as magnifiers, thermometers, and rulers provide more information than scientists can obtain using only their unaided senses.

2-3 ES2C: Weather changes from day to day and over the seasons. Weather can be described by measurable quantities, such as temperature and precipitation.

2-3 LS1A Plants have life cycles that include sprouting, growing to full size, forming fruits and flowers, shedding seeds (which begins a new cycle), and eventually dying. The details of the life cycle are different for different plants.

2-3 LS2A: Ecosystems support all life on the planet, including human life, by providing food, fresh water, and breathable air.

2-3 LS2D: Humans impact ecosystems in both positive and negative ways. Humans can help improve the health of ecosystems so that they provide habitats for plants and animals and resources for humans over the long term. For example, if people use fewer resources and recycle waste, there will be fewer negative impacts on natural systems.

2-3 SYSA: A system is a group of interacting parts that form a whole.

2-3 LS3C: Sometimes differences in characteristics give individual plants or animals an advantage in surviving and reproducing.

4-5 SYSA: Systems contain subsystems.

4-5 PS3B: Energy can be transferred from one place to another.

4-5 LS1C: Certain structures and behaviors enable plants and animals to respond to changes in their environment.

4-5 INQD Investigate: Investigations involve systematic collection and recording of relevant observations and data.

4-5 LS1A: Plants and animals can be sorted according to their structures and behaviors.

4-5 LS2A: An ecosystem includes all of the plant and animal populations and nonliving resources in a given area. Plants and animals depend on one another and the nonliving resources in their ecosystem to help them survive.

4-5 LS2B: Plants make their own food using energy from the sun. Animals get food by eating plants and/or other animals that eat plants. Plants make it possible for animals to use the energy of sunlight.

4-5 LS2C: Plants and animals are related in food webs with producers (plants that make their own food), consumers (animals that eat producers and/or other animals), and decomposers (primarily bacteria and fungi) that break down wastes and dead organisms, and return nutrients to the soil.

4-5 LS3A: In any ecosystem, some populations of organisms thrive and grow, some decline, and others do not survive at all.