

*K-1 Thematic Curriculum - Year 2
Round And Round (Seasons and Cycles)*

Theme/Essential Questions

Content knowledge

General

Everything changes over time; some changes are immediate while others take a long time; scientists try and discover and explain change; many types of change are part of a repeating or renewing cycle; cycles may be short or long, consisting of few to many steps.

Living things

There are many varieties of life forms on earth. All share a few essential traits: they consume nutrients of some sort; they grow; they reproduce; they have a preferred habitat; they exist in some sort of community and have a relationship and interact with other living things, as well as with the physical environment. Organisms can be thought of as producers, consumers, or recyclers (with some combinations of traits) in an integrated, interactive community. Organisms are adapted to their habitat by special physical traits and/or behaviors. Each habitat supports a group of organisms that create a community. There are many types and levels of interaction in the relationships among community members.

Seed and studies

Seeds grow into plants, and this growth is part of a life cycle; plants certain temperatures, water, sun, and minerals to grow well; life forms are adapted to their habitat; life forms are interdependent and are producers/consumers/recyclers.

Gardens

People make gardens to supply food, flowers, and other material needs, and for enjoyment, relaxation, and solace; gardens are a natural community in which people have a strong influence, by choosing the types of plants, adjusting soil fertility, amounts of water, etc.; gardens are dependent upon soil organisms that help to create and manage fertility.

Animal life cycles

- great blue heron*
- salmon*
- whales*

Animals need a specific mix of food, water, shelter, and space to survive; members of our natural community fulfill a variety of roles within it (consumers, predators, seed dispersal, disease control, nutrient recycling, prey, etc.).

Each animal has a unique habitat; some animals migrate, following air and ocean routes established thousands of generations ago; some animals are live-bearers, others lay eggs; each species has a different manner of raising its young; juveniles learn from adults, grow and reproduce, and die. Humans have had a major impact on virtually every species by interrupting the web of life.

Life cycles of people

Our lives are cycles of birth, growth, procreation and death; the body grows and changes in particular ways as we age; we have different roles and life work as we age; children are important members of families and society; children can do many things adults can do, and some things adults cannot do.

Seasons/Climates

Seasons are cyclical; seasonal weather patterns are determined by the earth's position in relation to the sun, winds and other factors; there are variations from typical seasonal weather; agriculture

follows seasonal cycles; weather instruments were invented to measure temperature, wind speed, humidity and barometric pressure; weather can be predicted; animals have changed over time to adapt for different seasons;

Energy

Energy makes things move; sound is produced by vibration; larger things vibrate more slowly producing lower pitched sounds, while smaller things vibrate faster producing higher pitched sounds; magnetism is a mutual attraction between two magnetic objects; some metals are magnetic and others are not; non-metallic objects are not magnetic; larger populations require more energy; consumption and distribution are determined by availability and transport, and are influenced by class and social issues; energy can be conserved, wasted.