Preschool Foundational Standards	Kindergarten Readiness Standards (End of Preschool)	Utah Core Kindergarten Standards (End of Kindergarten)
Standard 3: **Students will gain an understanding of Physical Science through the study of the forces of motion and the properties of materials.** *For Preschool Foundational Standards and Kindergarten Readiness Standards, students should have developmentally appropriate modeling and support.*		
1. Set objects in motion by pushing, pulling, kicking, rolling. 2. Describe motion as fast or slow.	1. Actively explores/experiments the properties of movement. 2. Ask questions about movement for further information. 3. Observe, compare, and describe the changes in movement on different surfaces or inclines.	Identify how non-living things move. 1. Observe and record how objects move in different ways, e.g., fast, slow, zigzag, round and round, up and down, straight line, back and forth, slide, roll, bounce, spin, swing, float, and glide. 2. Compare and contrast how physical properties of objects affect their movement, *(e.g., hard, soft, feathered, round, square, cone, geometric shapes)*.
Strategies (1) • Supply balls and blocks of different sizes and weights for children to manipulate throughout the daily routine Strategies (2) • Read aloud books such as the Tortoise and the Hare and have children act out the difference of the characters • Ask questions about who or what was faster or slower and why • Use classroom rules, walking in the classroom, to demonstrate the use of faster and slower	Strategies (1) • Provide blocks to make ramps, as well as pulleys, levers, and lots of wheels • Supply balls and blocks of different sizes and weights for children to manipulate throughout the daily routine Strategies (2) • Play games with children asking them to find objects that are under, over, near, behind, etc. Strategies (3) • Add items to the water table to provide opportunities to see movement using different surfaces and inclines	
1. Identify objects that are a part of the non-living world such as rocks and manmade objects.	1. Match models of objects with the real thing. 2. Know that non-living things do not need care and feeding like living things do.	Describe parts of non-living things. 1. Describe how parts are used to build things and how things can be taken apart. 2. Explain why things may not work the same if some of the parts are missing.
Strategies (1) • Provide collections for children to explore (buttons, blocks, shells, magnets, magnifiers, water, and sand) with a variety of containers throughout the daily routine for exploration • Provide materials that offer a variety of sensory experiences; sand, wood, water, natural and man-made materials • Create opportunities for children to observe the changes in water from solid to liquid to gas; rain, snow; make Jell-O, pudding, ice cream, etc. to observe the changes in properties	Strategies (1) • Give children opportunities to see real animals, trucks, etc., and have play ones available in the classroom for identification and comparison (toys, kitchen set up, stuffed animals, etc.) • Offer collections of materials and a variety of sensory experiences for children and work with them to compare and contrast Strategies (2) • Collect objects to sort; go on walks to collect materials to sort (shape, edges, color, size, feel) • Encourage children to make collections and discuss the various earth materials (i.e., rocks, soils, sands, etc.)	

Standard 4: **Students will gain an understanding of Life Science through the study of changes in organisms over time and the nature of living things.** *For Preschool Foundational Standards and Kindergarten Readiness Standards, students should have developmentally appropriate modeling and support.*		
1. Watch intently and say names and sounds of animals at a zoo or farm. 2. Match mother and baby animals.	1. Actively explores living things. 2. Ask questions for further information about living things. 3. Collect information about living things.	Investigate living things. 1. Construct questions, give reasons, and share finding about all living things. 2. Compare and contrast young plants and animals with their parents. 3. Describe some changes in plants and animals that are so slow or so fast that they are hard to see *(e.g., seasonal change, "fast" blooming flower, slow growth, hatching egg).*
Strategies (1) • Provide pictures from the children, books and magazines about living things that they know about • Sing songs and nursery rhymes identifying animals characteristics (Old MacDonald had a Farm and the Cow Jumped Over the Moon) Strategies (2) • Provide books and materials for children to learn about a variety of animals (farm, jungle, household, etc.) • Make a concentration game with the children matching the mother animal to the baby animal (real photographs then illustrations)	Strategies (1) • Use real or pretend binoculars to observe nature and help children to discuss their observations Strategies (2) • Provide experiences both indoors and outside for children to discuss and ask questions regarding the differences between living and non-living things in the environment Strategies (3) • Provide experiences in identifying things (real, pictures, models, books, etc.) as living and non-living	
1. Identify objects that are a part of the living world such as animals, insects, plants and humans. 2. Identify animals with their common living environment.	1. Describe the needs of plants and animals and how to keep them alive. 2. Name and identify most parts of the human body. 3. Identify problems in living things such as the plant is drooping. 4. Identify the life cycle of living things.	Describe the parts of living things. 1. Differentiate between the five senses and related body parts. 2. Identify major parts of plants *(e.g., roots, stem, leaf, flower, trunk, branches).* 3. Compare the parts of different animals *(e.g., skin, fur, feathers, scales; hand, wing, flipper, fin).*
Strategies (1) • Provide books and magazines about living things • Sing songs and nursery rhymes identifying animals characteristics (Old MacDonald had a Farm) Strategies (2) • Provide books and materials for children to learn about a variety of animals (farm, household, etc.) • Have children bring in photographs of their pets • Collect ants and have children observe as they dig their tunnels	Strategies (1) • Provide plants and small animals for children to take care of on a daily basis (gerbil, fish, frogs, plants, etc) Strategies (2) • Give children opportunities to use their bodies throughout the day in dance, running, jumping, etc., and identify what body parts are being used Strategies (3) • Provide opportunities to collect leaves, pine cones, seeds, shells, butterflies, bugs, etc., to investigate with a hand lens or microscope Strategies (4) • Ask questions about other living things and work with them to compare and contrast them (how do you move? A monkey? A worm?) • Provide many experiences for children to observe the life cycle (butterfly kits, frogs, live worms to observe, ants, etc.,)	