Vermont Early Learning: Science

Older Toddlers

Physical Sciences	**Children construct concepts of the properties of matter, sound, motion and energy through inquiry, exploration and investigations.** 1 Use objects in more than one way (e.g., use a bucket as a stool) 2 Label physical properties of objects (e.g., big, heavy) 3 Use basic words to describe speed of motion (e.g., “My car go fast.”) 4 Ask questions about motion and sound (e.g., Why?)
Life Sciences	**Children construct concepts about the characteristics of living organisms, their biology and ecosystems through exploration and investigations.** 1 Ask questions about the natural world 2 Name basic body parts and point to more complex body parts (e.g., foot, knees) 3 Identify familiar animals and match them to their babies
Earth and Space Sciences	**Children construct concepts about Earth’s systems, the impacts of human activity on these systems, and Earth’s place in the universe through observations, exploration, and investigations.** 1 Explore properties of water, soil, rocks and sand independently 2 Observe and discuss weather using basic terms (e.g., sunny, rainy) 3 Name the objects in the sky during daytime and nighttime (i.e., moon, sun, stars, clouds)
Engineering Design	**Children design, experiment, construct, alter, and problem solve to modify the natural world and meet their needs and wants.** 1 Use two toys together purposefully (e.g., use toy wrench to fix toy car) 2 Experiment with everyday objects in novel ways. 3 Build structures experimenting with height and breadth 4 Ask questions about how objects work 5 Makes observations, experiments, and adjusts actions to gather information needed to solve physical problems 6 Use simple tools as props for play (e.g., uses paper towel tube as tunnel for matchbox car or small balls) 7 Stack objects to build structures, including connecting blocks/units