

Subject Science	Grade K	Standard 2. Earth and Space Science	Objective 1. Investigate non-living things.
Content Big Ideas			
(E) Change is something that happens to many things. (E) Some changes are so slow or so fast that they are hard to see.	Standard 1 Big Ideas – Intended Learning Outcomes (PoS) People can often learn about things around them by just observing those things carefully (raise questions about the world around them, be willing to seek answers to some of those questions by making careful observations). (CoS) People are more likely to believe your ideas if you can give reasons for them (ask “How do you know?” in appropriate situations and attempt reasonable answers when others ask them the same questions). (NoS) When doing science activities, it is often helpful to work with a team and to share findings with others.		Science, Technology, and Society Big Ideas (T) People use appropriate tools and models to investigate the world. (A) People working alone or in groups often invent new ways to solve problems and get work done. (S) The tools and ways of doing things that people have invented affect all aspects of life.
Indicators: Measureable Outcomes framed by Standard 1 Big Ideas			
Indicator 1. Observe and record that big rocks break down into small rocks, e.g., boulders, rocks, pebbles, sand and record the results of observations. Indicator 2. Demonstrate how water and wind move non-living things. Indicator 3. Sort, group, and classify Earth materials, e.g., hard, smooth, rough, shiny, flat.			
Science language students should be able to use correctly: wind, rivers, soil, change.			
Guidance for Combining Content and Process			
Guidance for Combining Science, Technology, and Society			
Suggested Strategies In small groups, have students build a sand structure of their choosing in a sensory table. Ask them to investigate the following questions (and others that you or your students choose): (PoS) (NoS) (CoS) <ul style="list-style-type: none"> • What happens to your sand structure when wind or water is applied? • Will water run up the sand hill in your sensory table? In small groups have the students simulate a rock breaking activity utilizing such materials as hard candy, bread, graham crackers, and soda crackers. Have the students break the objects in plastic bags by hitting them with whatever tools they choose. Then, the teacher conducts a rock breaking activity with rocks of varying hardness, e.g., granite, sandstone, mica. Connect the two activities. Then ask them to investigate the following questions (and others that you or your students choose): (PoS) (NoS) (CoS) <ul style="list-style-type: none"> • What rocks (materials) break easily? • Do some rock (materials) break easier than others? Show pictures of landscapes (e.g., Goblin Valley, Arches, Natural Bridges). Have the students show examples of water changes and wind changes as they relate to the sensory table experience. (FA) (PoS) Collect examples of earth materials (e.g., soil, sand, rocks). Have the students investigate the following questions (and others that you or your students choose): (PoS) <ul style="list-style-type: none"> • Can you sort these earth materials? • In what different ways can you sort them? During literacy seat work time have students create word and picture reports of their findings on the above investigations. (L) (CoS)			
Earth and Space Science (E) Earth science (SS) Space science	Curriculum Connections (M) Mathematics (L) Language Arts	Processes, Communication, and Nature of Science (PoS) Processes of science (CoS) Communication of science (NoS) Nature of science	Applications: Science, Technology, and Society (T) Tools of science (A) Applications of science (S) Implications of science for people