

Pebbles, Sand, and Silt



TEKS:

1.1 Conduct classroom and field investigations following home and school safety procedures.

The student is expected to:

- b. **learn** how to use and conserve resources and materials.

1.5 Organisms, objects, and events have properties and patterns. The student is expected to:

- b. **identify, predict,** and **create** patterns including those seen in charts, graphs, and numbers.

1.6 Systems have parts and are composed of organisms and objects. The student is expected to:

- a. **sort** organisms and **objects** according to their parts and characteristics.

1.7 Many types of change occur. The student is expected to:

- a. **observe, measure,** and **record** changes in size, mass, color, position, quantity, sound, and movement.

1.10 The natural world includes rocks, soil, and water. The student is expected to:

- b. **observe** and **describe** differences in rocks and soil samples; and
- c. **identify** how rocks, soil, and water are used and how they can be recycled.

Teaching Time Line

Day	Lesson Title	Thinking Map	Sessions time	Instructional Method
1	Inventory, report any missing materials		45 min. prep. time	Teacher
2	1, part 1: Three Rocks	Bubble	40 min.	Whole and then Individual
3	1, part 2: Washing Three Rocks	Flow	40 min.	Pairs
4	1, part 3: First Sorting	Tree	30 min.	Pairs
5	1, part 4: Sorting Games		30 min.	Pairs and/or Small Groups
6	1, part 5: Start a Rock Collection	Circle	30 min.	Whole Group
7-8	2, part 1: Screening River Rocks	Flow	50 min.	Whole Group and then Pairs
9-10	2, part 2: River Rocks by Size		50 min.	Whole Group and then Pairs
11-12	2, part 3: Sand and Silt	Brace	50 min.	Whole and then Individual
13	2, part 4: Exploring Clay	Bubble/Double Bubble	30 min.	Individual
14	3, part 1: Rocks in Use	Circle	40 min.	Whole group
15	3, part 2: Looking at Sandpaper		20 min.	Small Groups
16	3, part 3: Sand Sculptures		30 min.	Individual
17-21	3, part 4 and 5: Clay Beads and Making Bricks (1 day to make bead then go back 2-3 days after they have dried to finish) (1 day to make bricks, 2 days to dry then dump from container to finish drying, 3-4 more to finish drying and then construct with them)	Flow Map	Most sessions are 30-40 min. with observation days in-between	Individual or centers (Possibly team with art teacher for these two activities)
22-24	4, part 1: Homemade Soil	Bubble	30 min.	Pairs
24	4, part 2: Soil Search		40 min.	Whole group then individual
25-26	4, part 3: Studying Local Soil		40 min.	Whole group and pairs
27-31	Review, ASSESS , Reteach as Needed			