



Target Strategies

2nd Grade - Solids and Liquids

Investigation 1

I can identify three states of matter (solid, liquid, gas).

I can describe properties of objects by looking at their states of matter.

I can make observations of solid materials.

I can group solid objects in a variety of ways.

I can show that objects can have the same properties and that different objects can be made of the same material.

I can use solid materials to build towers to model strength and stability.

I can discover solid objects in the schoolyard and sort them into two groups - natural and human-made.

Investigation 2

I can investigate different liquids.

I can observe different liquids and describe their properties.

I can observe that liquids fill different containers to different heights.

I can observe that liquids always have flat, level surfaces.

I can observe water closely and describe its properties.

I can make a puddle by choosing a good location and by using water.

Investigation 3

I can represent different sizes of solid materials.

I can investigate the properties of solid materials by pouring them from one container to another.

I can separate solid materials by using a screen.



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Investigation 3

I can use funnels to put solid materials into bottles.

I can observe how the materials looks, sound, and move when they are shaken or rolled.

I can compare the properties of solid materials with liquid materials.

I can use screens to separate mixtures of beads.

I can mix solid materials found outdoors with water and make observations when they are poured on a flat surface.

Investigation 4

I can investigate mixtures made of water and familiar solid materials.

I can observe and discuss the changes that occur immediately, and then again after a day when the mixtures are mixed together.

I can attempt to return solids to their starting condition by drying them.

I can add water to bottles of familiar liquids.

I can observe changes that happen immediately and then again after a day of settling.

I can determine if toothpaste is solid or liquid.

I can use a hot water bath to see if I can change the shape of ice, margarine, and chocolate.

I can make observations when heat or cold is added.

I can collect materials outdoors with water to see if I can make a “tea”.

I can look for changes in the color and clarity of the water as evidence that something is mixing with the water.



Target Strategies

5th Grade - Mixtures and Solutions

Investigation 4 -

I can find out about the source of local water, where it is stored, and how it is treated.

I can design a process to make ocean water suitable for drinking.

Investigation 5 -

I can use three substances to make three different combinations of two substances. I can add water and observe the changes that occur.

I can observe the changes that occur with the new products that form as evidence as a chemical reaction.

I can use techniques learned from earlier investigations to separate the products of the reactions.

I can identify the products by testing the precipitate and by evaporating the liquid.

I can use combinations of substances to produce chemical reactions.

I can observe the volume of gas and discover a new precipitate when all three substances are mixed in a bag.