

# Kindergarten

## Waterplay

### NYS Standard 4 (Science): Physical Setting (PS)

- ✓ **Key Idea 2: Many of the phenomena that we observe on Earth involve interactions among components of air, water, and land.**
- ✓ **Key Idea 3: Matter is made up of a particle whose properties determine the observable characteristics of matter and its reactivity.**

Major Understandings	Learning Experience/Objectives	Supporting Terms
<p><b>3.1b Matter has properties (color, hardness, odor, sound, taste) that can be observed through senses.</b></p> <p><b>3.1c Objects have properties that can be observed, described, and/or measured: length, width, volume, size, shape, mass or weight, temperature, texture, flexibility, reflectiveness of light.</b></p>	<p><b>Getting Started:</b> Students will use their background knowledge to complete a KWHL chart on water.</p> <p><b>Water Free-Play:</b> Students are to use their senses to explore water and discuss its properties.</p> <p><b>Absorbing:</b> Students will observe the absorption of water and describe their observations.</p>	<p>water, property, absorb, absorbing</p>
<p><b>3.1d Measurements can be made with standard metric units and nonstandard units.</b></p>	<p><b>Measuring with Water:</b> Students will use non-standard measuring cups of various shapes and sizes to measure the volume of water and compare the volume of the containers.</p>	<p>measure, container, volume</p>
<p><b>3.1e The material(s) an object is made up of determine some specific properties of the object (sink/float, conductivity, magnetism). Properties can be observed or measured with tools such as hand lenses, metric rulers, thermometers, balances, magnets, circuit testers, and graduated cylinders.</b></p> <p><b>3.1f Objects and / or materials can be sorted or classified according to their properties.</b></p>	<p><b>Sink or Float:</b> Students are to classify if various objects sink or float in water and record their findings.</p>	<p>sink, float,</p>
<p><b>3.2a Matter exists in three states: solid, liquid, gas.</b></p> <ul style="list-style-type: none"> <li>• Solids have a definite shape and volume</li> <li>• Liquids do not have a definite shape but have a definite volume.</li> <li>• Gases do no hold their shape or volume.</li> </ul> <p><b>3.2b Temperature can affect the state of matter of a substance.</b></p> <p><b>3.2c Changes in the properties or materials of objects can be observed and described.</b></p> <p><b>2.1c Water is recycled by nature process on Earth.</b></p> <ul style="list-style-type: none"> <li>• Evaporation: changing of water (liquid) into water vapor (gas).</li> </ul>	<p><b>Solid to Liquid:</b> Students will describe water in it different states and if heat or cold caused its change.</p> <p><b>Evaporation:</b> Students will observe the evaporation of water and classify water vapor as another state of matter.</p> <p><b>Dissolving:</b> Students will identify if objects dissolve in water and observe the effects of evaporation to retrieve salt from salt water.</p> <p><b>Water vs. Soapy Water:</b> Students will illustrate how soap effects water's cohesion.</p>	<p>solid, liquid, evaporation, dissolve, dissolving, cohesion, water, bubble</p>