UBD DESIGN	K	1	2	3
STANDARD/ CONCEPTS	K.5 The student will investigate and understand that water flows and has properties that can be observed and tested. Key concepts include a) water occurs in different phases	1.3 The student will investigate and understand how different common materials interact with water. Key concepts include a) some liquids will separate when mixed with water, but others will not; b) some solids will dissolve in water, but others will not; and c) some substances will dissolve more readily in hot water than in cold water.	2.3 The student will investigate and understand basic properties of solids, liquids, and gases. Key concepts include a) identification of distinguishing characteristics of solids, liquids, and gases; b) measurement of the mass and volume of solids and liquids; and c) changes in phases of matter with the addition or removal of energy.	3.3 The student will investigate and understand that objects are made of materials that can be described by their physical properties. Key concepts include a) objects are made of one or more materials; b) physical properties remain the same as the material is changed in visible size; and c) visible physical changes are identified.
ASSESSMENTS	• Observe understandings in play, centers, and conversation • Anecdotal Notes	Performance Assessment (Inquiry/ Investigation)	Summative Assessment (Practical Application)	Summative Assessment
DURATION/ SEQUENCE	Marking Period 3 5 Days	Marking Period 2 12 Days	Marking Period 3-4 16 Days	Marking Period 1 5 Days
CROSS-CURRICULAR CONNECTIONS	Math (attributes **K.15**)	Reading (make and confirm predictions **1.10**)	Mathematics (measurement tools **2.11b; 2.11c**)	Writing (quick write **3.9g**)
BEST LEARNING EXPERIENCES	• Open sort • Exploration with phases starting with a solid, and adding heat to get liquid and then gas • Closed sort	Students will predict and then mix inside a bottle of water -mixture- sand and water; glitter and water -solution- sugar cubes and water; baking soda and water	Simulate the transformation of matter by creating and examining a water cycle model, i.e., solid water (ice) to liquid (water) to gas (water vapor).	Students manipulate pieces of matter and describe in writing how objects changed and what physical property changed if it reduced in size.
BEST TEACHING METHODS	Inductive	Inquiry	Simulation Examination	Inquiry
RESOURCES	Pictures of different phases of water, materials for exploration of phases (ice cubes, water, hot plate, bowl)	Bottle of water, solids to mix with water, liquids to mix with water, journal	Plastic cups, rocks, ice, tape and solar energy	Objects to manipulate by size, paper, pencil
VERTICAL TEAM OBJECTIVES	Spiral Review	Spiral Review	Spiral Review	Spiral Review K-2 Matter Standards (TDEP Suggestion)