| Kit A | Engage <br> (To capture student's interest.) | Explore <br> (To provide hands-on experiences to use later to formally introduce a concept, process, or skill.) | Explain <br> (To allow learners to state their ideas in their own words, listen to one another, correct misconceptions, and introduce vocabulary.) | Elaborate <br> (To correct remaining misconceptions, apply and extend to new situations, resulting in a deeper understanding.) | Evaluate <br> (To assess understanding of concepts and proficiency with skills.) |
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| Unit: Sorting by Properties <br> Big Ideas (Key <br> Concepts): <br> - Objects and substances can be sorted by their observable properties. <br> - Water has unique physical properties dependant on its state of matter. <br> - Magnets can attract and repel other magnets and attract certain non-magnetic objects. | - Play the game "I'm Thinking of Something..." and describe a common object in the room by its properties. Have students try to guess what object you are describing. Have students list the different properties you used to describe the object. <br> - Have students describe objects to one another and have their partner guess what the object is by the students' description. <br> *Refer to companion document for more engage ideas (engage section). | - Explore, through observation \& their own simple trial \& error investigations, materials that are attracted/not attracted to magnets \& how the ends of magnets can push away from each other or attract to each other. <br> - Provide a variety of objects for students to observe \& describe according to their own criteria. Give students the opportunity to attach their own language to describing objects before introducing the properties of objects. <br> - Explore how puddles are formed \& how the shape and size of a puddle is determined by the pooling of water that takes the shape of the land. <br> *Refer to companion document for more explore ideas (in explore section). | - Ask students to sort a variety of objects according to common properties that they observed using their own sorting process. <br> - Have students share their sorting procedure with the rest of the class. As a class discuss the difference in different sorting techniques. <br> - Make a list of basic properties for students to use in their sorting process, color, shape, size, and texture. <br> - Explain and describe observations with magnets in own terms. <br> *Refer to companion document for more explain ideas (in explain section). | - Elaborate on the sorting by properties by introducing magnet and magnetic and nonmagnetic material. Have students sort objects by their ability to be attracted by a magnet. <br> - Give students the opportunity to explore the polarity of magnets and experience the "push" and "pull" of like and unlike poles. <br> - Make observations of a variety of shapes of ice and describe ice as a solid that keeps its shape. Then make observations of liquid water and describe liquid water that takes the shape of its container and can be poured from one container to another. <br> *Refer to companion document for more elaborate ideas (in elaborate section). | Formative: <br> - Use the student presentations \& discussion to assess the students' ability to describe objects by their properties. <br> - Use student's descriptions to assess their use of vocabulary that includes color/ size/shape \& texture. <br> - Use students' descriptions of their exploration of magnets \& magnetic material to assess their ability to describe observations. <br> Summative: <br> - Circle the objects that have the same shape. <br> - Choose the terms that best describe texture of objects. <br> - Draw a picture of an object that floats. <br> - Draw a picture of an object that sinks. <br> * Refer to companion document for more evaluate ideas (in evaluate section). |

