

Science Unit Map ~ Grade K ~ Kit D

Kit D Focus:

Force and Motion

Big Ideas:

- The position of the observer and object affect the description of motion.
- Pushes and pulls are forces that change the motion of objects.
- Change in motion is affected by the shape and mass of an object.
- Objects on Earth fall down toward the Earth unless something holds them up.

Resources	GLCEs	Battle Creek Kit Activity	Vocabulary
<p><u>Battle Creek Kit:</u> "Kindergarten in Motion"</p> <p><u>Trade Books:</u></p> <p><i>I Fall Down</i>, Vicki Cobb, 1004</p> <p><i>And Everyone Shouted Pull</i>, Claire Llewellyn, 2001</p> <p><i>Move It!</i>, Adrienne Mason, 2005</p> <p><u>Technology:</u> Please see additional resources in your unit binder</p>	<p>Force and Motion</p> <p>P.FM.00.11 Describe the position of an object (above, below, in front of, behind, on) in relation to other objects around it.</p> <p>P.FM.00.12 Describe the direction of a moving object (for example: away from or closer to) from different observers' views.</p> <p>P.FM.00.21 Observe how objects fall toward the Earth.</p> <p>P.FM.00.31 Demonstrate pushes and pulls on objects that can move.</p> <p>P.FM.00.32 Observe that objects initially at rest will move in the direction of a push or pull.</p> <p>P.FM.00.33 Observe how pushes and pulls can change the speed or direction of moving objects.</p>	<p>1,2,10,11</p> <p>1,2,10,11</p> <p>7,8,9</p> <p>2,3,5,6,9</p> <p>2,3,5,9</p> <p>2,5</p>	<p>push pull direction speed shape size mass at rest above below in front of behind on under between on top away from closer to toward fast, faster slow, slower</p>

	<p>P.FM.00.34 Observe how the shape and mass of an object can affect motion.</p> <p>S.IP.00.11 Make purposeful observations of the movement of objects in response to pushes and pulls.</p> <p>S.IP.00.12 Generate questions based on observations of objects falling toward the Earth.</p> <p>S.IP.00.13 Plan and conduct simple investigations about pushes and pulls changing the speed or direction of moving objects.</p> <p>S.IP.00.14 Manipulate simple tools (pencil) to collect data about the affect of pulls or pushes changing the speed or direction of moving objects.</p> <p>S.IP.00.16 Make accurate measurements with appropriate (non-standard) units for the measurement tool</p> <p>S.IP.00.16 Construct simple charts from investigations about pushes and pulls changing the speed or direction of moving objects.</p>	<p>2,4,6,8</p> <p>1,2,3,4,6,7,8,9,11</p> <p>1,2,4,7,8,9</p> <p>2,3,4,6,7,8,9</p> <p>3</p> <p>3,8,9</p> <p>6,9</p>	
--	---	---	--

	<p>S.IA.00.12 Communicate and present findings of observations about the motion of an object</p> <p>S.IA.00.13 Develop strategies for information gathering</p> <p>S.IA.00.14 Develop strategies for information gathering</p> <p>S.RS.00.11 Demonstrate the effect of pushes or pulls on the motion of objects through various illustrations, performances, models, exhibits or activities.</p>	<p>1,2,4,5,6,7,8,9,10,11</p> <p>1,2,3,4,5,6,7,8,9,10,11</p> <p>3,5,6,8,9</p> <p>6,7</p>	
--	--	---	--