

Float & Sink-5th Grade

Timeframe 10 weeks

May 11. 2012

Standards	Assessment/ Student Evidence	Academic Vocabulary	Resources
SYSA Systems contain subsystems.	<ul style="list-style-type: none"> Identify at least one of the subsystems of an object, plant, or animal (e.g., an airplane contains subsystems for propulsion, landing, and control) 	Systems Subsystems	<i>Floating & Sinking</i> Teacher Guide by Science & Technology for Children SPS inserts into Teacher Guide
SYSD Predict what might happen to a system if a part in one or more of its subsystems is missing, broken, worn out, mismatched or misconnected.			
INQB Scientists plan and conduct different kinds of investigations, depending on the questions they are trying to answer. Types of investigations include systematic observations and descriptions, field studies, models and open-ended explorations as well as controlled experiments.	<ul style="list-style-type: none"> Given a research question, plan an appropriate investigation, which may include systematic observations, field studies, models, open-ended explorations, or controlled experiments 	Investigation Controlled Experiment	
INQC An experiment involves a comparison for an experiment to be valid and fair. All the things that can possibly change the outcome of the experiment should be kept the same, if possible.			
INQD Investigations involve systematic collection and recording of relevant observations and data.			

Power Standards in green

Complementary Standards in yellow

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INQE Repeated trials are necessary for reliability.			
INQG Scientific explanations emphasize evidence, have logically consistent arguments, and use known scientific principles, models, and theories.	<ul style="list-style-type: none"> • Create a simple model to represent an event, system, or process • Use the model to learn something about the event, system, or process • Explain how the model is similar to and different from the thing being modeled 	Model	
PS1A The weight of an object is a measure of how strongly it is pulled down toward the ground by gravity. A spring scale can measure the pulling force.	<ul style="list-style-type: none"> • Use a spring scale to measure the weights of several objects accurately. Explain that the weight of an object is a measure of the force of gravity on the object. Record the measurements in a table. 	Spring Scale Weight Force of Gravity	
PS1C (6-8) Unbalanced forces will cause changes in the speed or direction of an object's motion. The motion of an object will stay the same when forces are balanced.	<ul style="list-style-type: none"> • Unbalanced forces will cause changes in the speed or direction of an object's motion. The motion of an object will stay the same when forces are balanced. 	Balanced Forces Unbalanced Forces	
PS2C The total amount of matter is conserved (stays the same) when it undergoes a physical change such as when an object is broken into tiny pieces, when a solid is dissolved in a liquid, or when matter changes state (solid, liquid, gas).	<ul style="list-style-type: none"> • If an object is weighed, then broken into small pieces, predict that the small pieces will weigh the same as the large piece. • Explain why the weight will be the same. 	Matter	

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