

Lesson Plan Template

Grade: First		Subject: Science/Math	
Materials: Tub/bucket Water Apple Bar graph worksheet		Technology Needed: N/A	
Instructional Strategies: <input type="checkbox"/> Direct instruction <input type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list)		Guided Practices and Concrete Application: <input type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity <input type="checkbox"/> Pairing/collaboration <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:	
Standard(s) ESS1.3 Planning and carrying out investigations -Make observations (firsthand or from media) to collect data that can be used to make comparisons. 1.MD.4 Organize, represent, and interpret data with up to three categories. Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another		Differentiation Below Proficiency: <ul style="list-style-type: none"> • Have teacher aid help with worksheet • Have a peer help student with worksheet Above Proficiency: <ul style="list-style-type: none"> • Ask more in-depth questions • Pair with below student to help them Approaching/Emerging Proficiency: <ul style="list-style-type: none"> • Pair with above student to help Modalities/Learning Preferences: <ul style="list-style-type: none"> • Visual – seeing experiment, worksheet • Auditory – hearing vocab, directions 	
Objective(s) By the end of the lesson, students will determine whether an apple sinks or floats in water. Students will also know how to fill out a simple bar graph and know how to read the data collected. Bloom's Taxonomy Cognitive Level: Apply, analyze, evaluate, create		Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) <ul style="list-style-type: none"> • Listening ears on • Hands in your lap • We will look but not touch • When we are grabbing materials make sure we are not talking, grab what you need and come back to the carpet in a quiet manner. 	
Classroom Management- (grouping(s), movement/transitions, etc.) <ul style="list-style-type: none"> • Start in front on carpet • Move by table groups to grab crayon and pencil and clip boards, come back to carpet • 123 eyes on me -- I should see all eyes on me 			
Minutes	Procedures		
2	Set-up/Prep: <ul style="list-style-type: none"> • Have bucket/tub full of water • Have apple on side ready • Make sure bucket/tub of water is not distracting • Have enough copies printed for each student 		
2	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.) <ul style="list-style-type: none"> • I have a great, fun activity for all of you today!! • But to be able to do the fun activity you all have to have your listening ears on, let's make sure they are all on – rub your ears, are they turned on now?? GREAT, listen carefully • Today we are going to experiment if an apple floats in water or if it will sink in water • <u>No blurting, I want to see hands raised and only hear one voice talking</u> 		
5-10	Explain: (concepts, procedures, vocabulary, etc.) We have a few vocab words to go over: <u>Does anyone know what experiment means? (a test to find something out)</u> <u>Has anyone heard the word, hypothesis? Does anyone know what it means? (a guess)</u> we are going to guess/hypothesize if the apple is going to sink or float in water <u>Float? (object rests on the surface water)</u> <u>Sink? (object under water)</u>		

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	<p><u>Who knows what collecting data means? (gathering and measuring information about something)</u> -- we are going to write down who thinks the apple is going to float and who thinks the apple is going to sink</p> <ul style="list-style-type: none"> • Before we experiment, I want you to collect your data on this worksheet • Call kids by table groups to grab pencil, one crayon and a clipboard – come back to carpet, pass out paper • First put your name at the top!! I would like you to color in the apple in you think it is going to float (stay above the water) or sink (go under the water) – point to apple (once done coloring that apple put your items on the floor in front of you and your hands in your lap) <p><u>Raise your hand high and keep it up if you think the apple is going to float (count floating hands)</u></p> <ul style="list-style-type: none"> • -- watch me first, show them how to fill in bar graph – now you fill it in <p><u>Raise your hand high and keep it up if you think the apple is going to sink (count sinking hands)</u></p> <ul style="list-style-type: none"> • -- watch me first, show them how to fill in bar graph – now you fill it in <p><u>Which one has more? How do you know that?</u> -- show them what apple to color – now you color it in</p>
5-7	<p>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</p> <ul style="list-style-type: none"> • Review what every ones guesses/hypothesis is/are • Put apple in water <p><u>What did we discover?</u></p> <p><u>Why do you think the apple floats?</u> (apples float because 25% of their volume (body) is air)</p>
5	<p>Review (wrap up and transition to next activity):</p> <p><u>What did the apple do?</u> -- show them what part to fill in, have them fill it in</p> <p><u>Anyone remember what experiment means?</u></p> <p><u>Hypothesis?</u></p> <p><u>Float?</u></p> <p><u>Sink?</u></p> <p><u>What does collect data mean?</u></p>
<p>Formative Assessment: (linked to objectives)</p> <p>Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.</p> <ul style="list-style-type: none"> • Fist to 5 <p>Consideration for Back-up Plan:</p> <p>Fill out one paper for whole class instead of individually Instead of doing full group bring up small groups and have them keep the secret of if the apple sank or floated. Then come back as a whole group and ask the questions</p>	<p>Summative Assessment (linked back to objectives)</p> <p>End of lesson:</p> <p>Collect bar graph worksheet (math lesson)</p> <p>If applicable- overall unit, chapter, concept, etc.:</p>
<p>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</p> <p>This lesson originally was a very good lesson. The only changes I would make would be to add some type of movement throughout the lesson. There was a student that came up to me and said that they thought big apples would sink because they are bigger and heavier and little apples would float since they are smaller and lighter. I have not thought of this concept while writing the lesson. It was a good thing there were multiple apples to choose from for this lesson so I grabbed a big apple and a little apple to prove that no matter the size of the apples they will still float. I do need to change how I go about my procedures; I need to say them right away at the beginning of the lesson instead of doing it while they are doing what I asked of them.</p>	

Name: _____



Will Apples Sink or Float?



15		
14		
13		
12		
11		
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		
	Sink	Float

I think the apple will

Sink	Float

The class thinks the apple will

Sink	Float

The apple actually did this

Sink	Float