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| WATER-FLOATING AND SINKING | 10.9.2018 |

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| Subject |  | Overview |
| |  | | --- | | Basic Science | | Prepared By | | [Instructor Name] | | Grade Level | | 1 | |  | This lesson plan covers teaching content for;   1. Objects that float on water. 2. Objects that sink in water |

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| Materials Required -Clear plastic container  -Water  - Sink and float objects (bottle top,  wooden peg, pop stick,  feather, coin, key, stone, button,  shell, Pencil, paper clip crayon,  marble, plastic spoon, bar of soap, leaf  etc.)  -Toy ship |
| Additional Resources  * <https://oar.marine.ie/bitstream/handle/10793/938/LessonPlan_Science_What%20Floats%20What%20Sinks%20and%20Why_191213.pdf?sequence=1&isAllowed=y> * <https://www.uen.org/lessonplan/view/5673> * <https://www.education.com/lesson-plan/matter-sink-or-float/> * <https://www.brighthubeducation.com/lesson-plans-grades-1-2/129311-first-grade-summer-science-what-floats/> |
| Additional Notes |

|  |  | Teacher Guide |  | Guided Practice |
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| **Objectives** Students will be able to;   1. Identify things that float or sink in water. 2. Demonstrate how objects float or sink in water.  Information/Instruction  1. Gather students in a group and tell them that they will be learning about sinking and floating. 2. Show them a tub filled with water and the objects that will be tested. 3. Define **sink** as the action of an object when it becomes submerged in a liquid. 4. Define **float** as the action of an object when it sits on the surface of a liquid. 5. Have students guess   which objects will sink, and which will float?   1. Tell students that lighter objects are more likely to stay on the surface of the water and heavier objects are more likely to sink to the bottom of the tub. 2. Drop a couple objects into the water to 3. Show students how you would like them to place the objects avoid splashing and show them what you are looking for to determine whether the object floats or sinks. 4. Make a "float" and a "sink" pile and put your objects in their corresponding pile. |  | **Day 1/Lesson 1- 15 Mins**   1. Bring the students together in a group. 2. You will need 2 large clear containers filled with water to sort floating and sinking objects. 3. Have them label the first container “Floating” and the second one “Sinking” 4. Gather objects like large rock, bottle top, wooden peg, pop stick, feather, coin, key, gem stone, button, shell and a leaf. 5. Place one item into the water at a time and ask them “Does it float or sink”?  Place the object into the corresponding labeled container. 6. Talk about why some objects sank and others didn’t. 7. Discuss the weight, size and material the object is made of and how this influences the floating ability. 8. Talk about why there were bubbles when some objects sank.   **Day 3 Lesson 3- 15 mins**   1. Float a toy boat in a clear tub filled with water. 2. Have students find ways to sink the ship in the tank. 3. Students may wish to add items to weigh the ship down, so it is important that they use items that are waterproof. 4. Explain that you can waterlog the ship by tipping it over and filling it with water. 5. Have students predict why the boat sinks when it tips over. 6. Explain that air inside the ship helps the boat float, but when it tips over, the air escapes and water fill that space. Thus, the boat sinks. |  | **Day 2 Lesson 2- 15 mins**   1. Split your class into groups, one for each work station. 2. Have students test one object at a time, placing them into their own "float" and "sink" piles as they finish. 3. As groups finish, go around and check their "sink" and "float" piles for correctness. 4. Ask students to clean up any spills that may have happened, then to return to their seats.   **Day 4 Lesson 4- 15 mins**   1. Give pairs of students a clear cup of water and small items that sink or float. 2. Remind them that when an object is placed in water, the level will rise. 3. Have them predict how much they think the water will rise for each item. 4. Ask them to mark the initial water level and draw their predictions on the side of the cup. 5. Tell them they can make their predictions based on the weight, shape, size, and density of their objects. 6. They can use different colors of marker to distinguish their own predictions. Then have them drop different items into the cup, make observations, and record their data. 7. Encourage them to measure with a ruler to see how much the water rose. |
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| Assessment Activity  1. Review students' "float" and "sink" piles as well as their books to assess their levels of understanding. |  | Assessment Activity  1. Have children draw objects that would sink and those that would float in their notebooks. 2. Ask the students to search around the house for more objects to test if they can float and sink. |  |  |
| Summary |  |  |  |  |