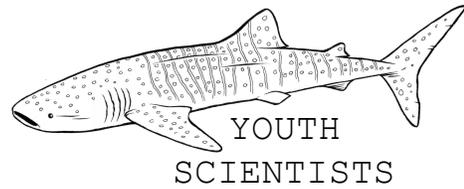


# Buoyancy

*What is it? How does it affect divers?*



## Supplies:

- 2 citrus fruits (such as mandarin oranges)
- Tall glass jar or large bowl/bucket
- Water
- Other objects to test for buoyancy
- Paper and Pencil for Note-taking

## Instructions:

1. Take a look at the citrus fruit. Create a hypothesis of what might happen when you place a whole mandarin into the water; will it sink or float?
2. Place it in the water and observe what happens.
  - a. Did the mandarin do what you expected?
  - b. What might be some reasons that it did or did not?
3. Next, peel the mandarin, making sure to remove as much of the pith, or white part, as possible. What do you think will happen if we drop this peeled mandarin in?
4. Drop it in the water. Observe and discuss the results.
  - a. How are the whole mandarin and peeled mandarin different?
  - b. Do they have the same weight? density?
  - c. Do they displace the same amount of water?
5. Discuss theories about the phenomena that was witnessed.
  - a. What forces were playing a part in this demonstration?
6. Drop other objects into the water. For each object, make a hypothesis- what do you expect to happen?



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