



# Marine Science Club - Water/Water Cycle/Water Quality

## Suggestions for meeting topics, activities, and resources

### Brief Background

Regardless of whether something is affected directly or indirectly by water, water is essential to everything on Earth. Water may seem like a boring topic, but think about what the earth and all processes that rely on water. Hydrogen bonds and molecular polarity give water unique characteristics that help make it so critical to life on Earth. There are many unique properties of water that make it a meaningful subject to investigate further. For instance, water is the only substance that can naturally exist as a solid, liquid, or gas under temperatures found on Earth. Water also has a high heat capacity, can dissolve more substances than any other liquid, the solid state is less dense than the liquid state, and it has a very high surface tension.

### Resources & References

- Websites**
  - USGS - [https://www.usgs.gov/special-topics/water-science-school/science/water-properties-information-topic?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/special-topics/water-science-school/science/water-properties-information-topic?qt-science_center_objects=0#qt-science_center_objects)
  - USGS - The fundamentals of the water cycle (<https://www.usgs.gov/special-topics/water-science-school/science/fundamentals-water-cycle>)
  - NASA - The Water Cycle and Climate Change (<https://earthobservatory.nasa.gov/features/Water/page3.php>)
  - National Climate Assessment (<https://nca2014.globalchange.gov/highlights/report-findings/water-supply>)
- Videos**
  - Why are water cycle processes important? - NASA (<https://gpm.nasa.gov/resources/faq/why-are-water-cycle-processes-important>)
  - NOAA (<https://oceantoday.noaa.gov/watercycle/>)

### Activity/Service Project Suggestions

- Field Trip/Citizen Science**
  - As a group learn how to monitor water quality and monitor a site on or near campus. Inform others about water quality and changes to your sampling site. (<https://bayosideclassroom.lumcon.edu/>)
- Service Project**
  - Visit a classroom at a nearby school and teach the students about water and water quality.
  - Create artwork (any media) that educates others about the importance of water to ecosystems and/or populations (including human).