



Bathtub Science

Explore the States of Water!

Beginner: Play with ice cubes during bath time to explore liquids and solids.

[Tip]: Label the states as you feel them. For example, say “liquid” while touching the water, and “solid” while touching the ice cubes.

Intermediate: Play with ice cubes during bath time while discussing the properties of water and temperature.

[Tip]: When playing with the ice cubes, say things like “When water gets really cold, it turns into a solid (ice)”, and “When ice is heated, it turns into a liquid (water).”

Experienced: Play with ice cubes during bath time; predict whether ice will melt under different circumstances.

[Tip]: For example, ask “Do you think the ice cube will melt faster by heating it, cooling it, or leaving it out of the water?”

Why is this important? Exploring water in its different states allows children to learn scientific concepts at an early age.

References: Anders, Y., Hardy, I., Pauen, S., Ramseger, J., Sodian, B., & Steffensky, M. (2018). Early science education – Goals and process-related quality criteria for science teaching. Barbara Budrich Publishers. Kambouri-Danos, M., Ravanis, K., Jameau, A., & Boilevin, J. M. (2019). Precursor models and early years science learning: A case study related to the water state changes. *Early Childhood Education Journal*, 47, 475-488. <https://doi.org/10.1007/s10643-019-00937-5>