



Mats vs. Bags: observations and inferences from an oyster reef Benchmarks

SC.6.N.1

Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.



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Vocabulary

Observation: either an activity of a living being, such as a human, consisting of receiving knowledge of the outside world through the senses, or the recording of data using scientific instruments.

Inference: the act or process of deriving logical conclusions from premises known or assumed to be true.

Oyster reef: oyster reefs are structures built primarily by the eastern oyster in their reproductive process. The oyster's larvae need a hard surface to live on while they develop into further stages in the life cycle, and they tend to choose the shells of other oysters. As further generations develop, they continue to live and grow on the shells of their predecessors, creating a large reef structure that is submerged under shallow water.

Oyster bag: mesh bag filled with oyster shell that is used to build artificial oyster reefs.

Oyster mat reefs: mats with oyster shell directly fixed to them, used to build artificial oyster reefs.

Organism: an individual form of life, such as plants, animals, protist, bacterium, or fungi.

Salinity: the dissolved salt content of a substance like soil or water.



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Guiding Questions

1. Give two examples of observations in the video.
2. Give two examples of inferences in the video.
3. What research was the narrator doing and why is it important?
4. Give an example of an observation and inference you have made in the last 24 hours.