## High Touch High Tech ${ }^{\circledR}$ <br> Science Experiences That Come To You ${ }^{\text {™ }}$

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## Sea Urchin Symmetry©

Like other echinoderms, adult sea urchins are recognizable by their 5-point symmetry. Starfish, sea cucumbers, and sand dollars are all in this mirror-image family!

## Supplies:

- Sea urchin photo images
- $30 \times$ Small wooden toothpicks
- 1 x large marshmallow
- Small plate


## Instructions:

1. Look at photos of sea urchins to observe their symmetry.
2. Take the marshmallow and insert toothpicks on each side equally.
3. The marshmallow is the main body of the sea urchin while the toothpicks are the spines!

## Science Behind It:

Sea urchins are typically spiny, spherical shaped animals. About 950 species live on the seabed, inhabiting all oceans and from the shallow inter coastal areas to 5,000 meters deep. Their hard shells are round and spiny, typically from 3 to 10 cm ( 1 to 4 in ) across. Sea urchins move slowly, crawling with their tube feet, and sometimes pushing themselves with their spines.

They feed mostly on algae (seaweed) but also eat slow-moving animals. Sea urchins help keep the seaweed and coral reefs maintained as an integral part of the coral reef habitat. Their predators include sea otters, starfish, wolf eels, triggerfish, and humans. Like other echinoderms (a classification of animals), urchins have 5 lines of symmetry as adults, which are the mirror images of each side. They can be found across all the oceans, all climates from tropical to polar.

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## Sea Urchin Photo Images



