Sea Stars on the Ocean Floor—A Mini Diorama



Crayola Supplies

Colored Pencils
Markers
Arts & Crafts Brushes
Pointed Tip Scissors
Tempera Mixing Mediums
Shaper Paper

Household Supplies

recycled newspaper ruler paper towels recycled cardboard box container(s) of water

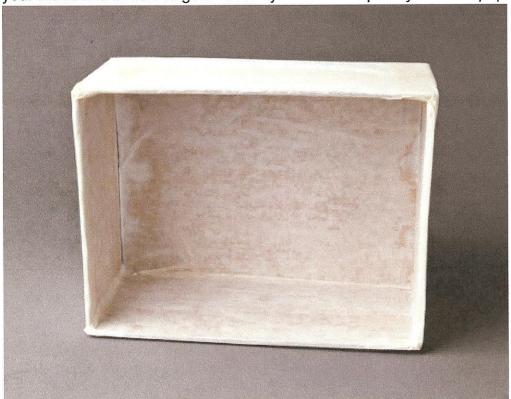
Why?

Sea stars are often called starfish, although they are not actually fish. Discover what other amazing things you can learn about sea stars while creating this 3-D mini diorama.

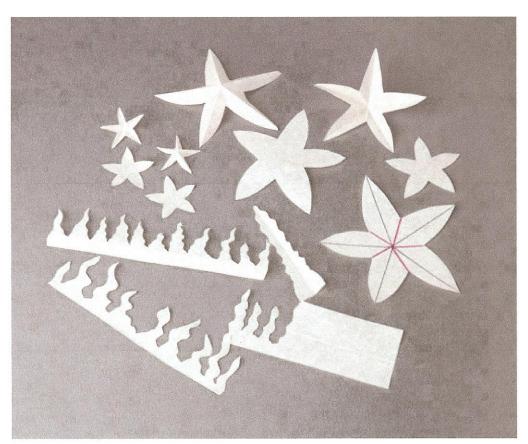
Steps

1. The number of "arms" on a sea star can vary from species to species, and even two individuals from the same species can have different numbers

- of arms. Most sea stars have five arms that are located very evenly around a disc shaped body—typically 72 degrees apart. This arrangement is known as pentaradial symmetry.
- 2. Sea stars are found in all of the world's oceans. Research more information about sea stars. How many different types of species of sea stars are there? Where can they be found? How do they move? Use what you learn about sea stars to help you create a mini diorama of sea stars on the ocean floor with Crayola Shaper Paper™. Here are some tips to help you get started.
- 3. First, measure, mark, and cut several sheets of Shaper Paper to cover a small cardboard box. Cover your craft area with newspaper. Quickly dip your sheets into water. Remove excess water by running the paper between your index and middle fingers. Cover your box completely with the paper.



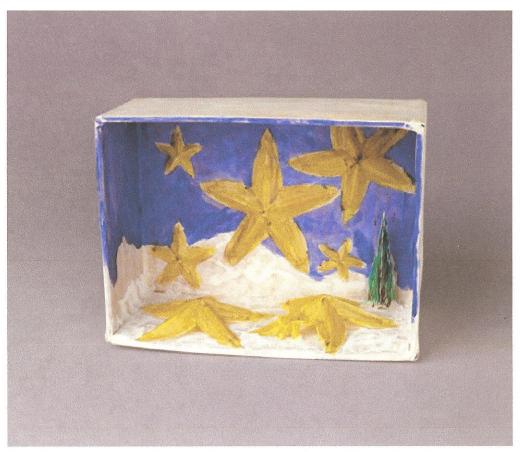
4. Next cut out your sea stars in various sizes. Fold them so they are 3-dimensional. Then cut out whimsical seaweed shapes to add decoration to your diorama.



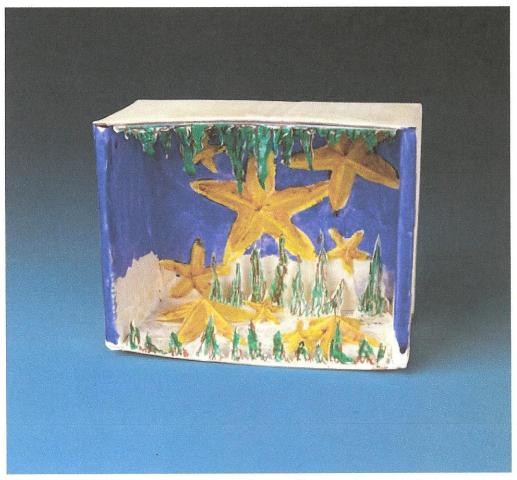
5. Decorate the inside of the box and all of the pieces with Crayola Markers. If you like, add one or more coats of Crayola Mixing Medium to add texture to the ocean floor and your sea stars (Texture It!), to give the water a swirling effect (Pearl It!), and sparkle to the plant life (Glitter It!). Air-dry everything.



6. With a brush, apply a very small amount of water to the edges of the stars where you want them to adhere to the box. Use your fingers or the stick end of the brush to hold the Shaper Paper down for a few seconds.



7. Add your seaweed using the same method. Air-dry the diorama.



8. Give an oral presentation about your diorama to your classmates and tell them what you learned about sea stars in your research.

Adaptations

Read Sea Stars by Lola M. Schaefer and Gail Saunders-Smith. This book introduces sea stars, their appearance, and behavior.

The sea star uses a hydraulic water vascular system to feed, transport waste, and move around. What other species of animals use this same system?

Draw a physical map, labeling what species of sea stars are found in each ocean.

Sea stars have the magnificent ability to digest food outside of their bodies by being everted. What types of benefits could this provide for the sea star?

Find out where sea stars' eyes are located and what kinds of things they are able to see. Draw or paint what you imagine the world looks like to a sea star.

Assessment: Do students have a clear understanding of the unique systems that sea stars possess that enable them to move, eat, see, and exist? Do their dioramas accurately depict the shapes and habitats of sea stars?

Benefits

Students research the habitats of sea stars, identify different species, discover variations in the number of arms, and discover how they move.

Students create realistic representations of the habitats of sea stars.

Students present facts about sea stars to their classmates.

Grades

Grades 4 to 6 Grades 7 to 12

Subjects

Science Visual Arts

Time

30 to 60 minutes Multiple Sessions

Curriculum Standards Links

US: Research U.S. Standards
UK: Research UK Standards

Canada: Research Canada Standards

Safety Guidelines

Small Parts— WARNING: CHOKING HAZARD—Small parts. Not for children under 3 years.

Scissors—ATTENTION: The cutting edges of scissors are sharp and care should be taken whenever cutting or handling. Blunt-tip scissors should be used only by children 4 years and older. Pointed-tip scissors should be used only by children 6 years and older.