

Exploration Sea Shells

COMPARE

What's different about these shells? Describe each shell using words.



Giant Sundial

How would you describe the shape of this shell?

Do you think all of these shells are the same shape?



Marble Cone

Do you see any patterns on this shell?

How is this shell different from the others?



Slit Shell

Do you think this shell is rough or smooth?

How do you think this shell would feel if you touched it?

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FUN FACTS



Giant Sundial

The surface of this shell consists of crossing spiral lines and radiating ridges that produce a pattern of raised granules. This kind of shell is found mostly in shallow waters of the Pacific and it is very uncommon.



Marble Cone

This shell is found in the Pacific and is very uncommon. It uses a very sharp tooth to inject poison into its prey, then it swallows its meal whole.



Slit Shell

This shell comes from an ancient group of mollusks with only sixteen surviving species all of which are vegetarians. The animal inside the shell uses the slit to breathe.



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FIELD JOURNAL

Instructions

Go on a shell hunt! The next time you go to a beach, find as many interesting sea shells as you can.

Choose 3 shells that look different from each other. Then, draw a picture of each shell. As you draw each shell, think about these questions:

- What shape is the shell?
- Is it shiny and smooth? Is it bumpy and rough? Do you see any patterns on the shell?
- How many different colors do you see on the shell?

When you are finished, look at all your pictures. How are these shells the same? How are they different?

Your Name:	Today's Date:
What's the Weather Like?	
Draw the shells you find in the space below.	



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TIPS FOR ADULT HELPERS

General Tips

- 1. Try to ask children open-ended questions.** These kind of questions help children talk about nature. For example, a useful open-ended question could be, “How would you describe this shell?”
- 2. There are many “correct” answers.** When asking open-ended questions, remember that there is no one “correct” answer. There are many “right” answers. The goal is to have children and adults have a thoughtful discussion.
- 3. Praise thoughtful answers.** If you ask a close-ended question (such as “What animal lives in that shell?” or “What color is that bird?”), any thoughtful answer could be praised. Even if the child’s answer is inaccurate, you could say something like, “That was a great idea. You know, that is how scientists learn, by thinking and trying out different ideas.”
- 4. Start from what the child knows already.** When trying to get a thoughtful discussion going, start with what the child already knows about a topic. Use that information as a springboard for further exploration. Through discussion and exploration, children can expand and revise their knowledge about nature.
- 5. Explore together.** If the topic is new to you as an adult helper, share this information with the child. You can make guesses and explore together. All science starts off with questions, not answers.
- 6. Science IS exploration and discovery.** When you let children try out different theories, you help introduce them to the scientific method and start building research skills.
- 7. Explore a science book together.** If a child is interested in a particular topic, you might want to follow up the activity reading a science book together and writing down what you have learned about the topic.

Examples of Open Ended Questions About Sea Shells

When discussing the patterns of the shells, you might begin by asking:

- Do you see any **patterns** on these shells? What do they look like?
- Are any of the patterns alike?
- Are any of the patterns different?
- Do the shells look smooth or bumpy?

When discussing **similarities and differences**, you might ask the child:

- How are these shells similar to each other?
- How are they different?

If the child is having a hard time coming up with ideas, you might ask him or her more focused questions, such as:

- Are all of the shells the same color?
- Do all of the shells have the same patterns?
- Are all of the shells shaped the same?
- Are some round?
- Are some shaped like a cone?