The Education Program at the New Jersey Sea Grant Consortium



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HOMES FOR HERMIT CRABS

OVERVIEW

During this interdisciplinary lesson, students listen to a story about hermit crabs, discuss hermit crabs to gain scientific understanding and participate in a visual arts activity that reinforces the concept that hermit crabs do not make their own shell and must borrow shells made by mollusks to use for shelter and protection.

OBJECTIVES

Following completion of this lesson, the students will be able to:

- Identify the parts of a hermit crab.
- Understand that the hermit crab is classified as a crustacean (with other crabs, lobsters, shrimp, etc.)
- Understand where and how the hermit crab gets its shell.
- Be able to differentiate between a hermit crab and a mollusk.

GRADE LEVELS

K-4th grades

NJCC

Science Indicators:

STANDARDS

5.5: End of Grade 2: A-2, End of Grade4: A-3, B-1, B-2, C-1;

5.10: End of Grade 2: A-1, End of Grade 4 B-1

Language Arts Indicators:

3.3: End of Grade 3: B1, B2, End of Grade 4: B4, End of Grade 8: B3, D1, D2, D3

3.4: End of Grade 4: A1, B1, B2, B6, End of Grade 8: B2

Visual Arts Indicators:

1.2-1

MATERIALS

- "A House For A Hermit Crab" by Eric Carle, ISBN # 0-06-445124-0,
- "The Hermit Crab and Its Shells" and Hermit Crab Anatomy worksheets, included in this lesson plan

PROCEDURES

Introduce lesson by asking students to share what they know about hermit crabs. As students share information, clarify and/or add additional information that connects to what students already know. Next, read *A House for Hermit Crab*, by Eric Carle. Following completion of the reading, discuss story with students, linking information back to your original discussion about hermit crabs.

Next, introduce the hermit crab activity. Pass out the worksheet included in this lesson plan entitled "Hermit Crab Anatomy." As a class, label the five body parts listed. After students finish the anatomy worksheet, explain that they will cut out the hermit crab diagram on the worksheet to insert into a second worksheet, "The Hermit Crab and Its Shells."

Pre-slit this second worksheet in advance. Demonstrate how to fold back the tail of the hermit crab cut-out to slip it into "" worksheet so it can move from one shell to the other just like the hermit crab in the story. The teacher should then allow students time to decorate their worksheet Hermit crabs do not make their own shells. Instead they move into empty seashells made by mollusks, especially snails. Some species of hermit crab move from shell to shell constantly, while others only do so as they themselves grow and their borrowed shell becomes too small. The hermit crab's tail and lower legs are soft requiring the protection of the borrowed shell. The lower legs hold onto the shell. Hermit crabs also have a soft-coiled abdomen, which is also protected by the hard shell that it finds. They have four antennae, two long and two short, these are used as sense organs for hearing and smelling. They also have eyes for seeing. Hermit crabs have large pinchers and small pinchers. The large pinchers are used for defense and climbing and the small pinchers are used for feeding and holding onto things. Hermit crabs have jointed legs, which are used for climbing and walking. The entire head and thorax of the hermit crab are covered with an exoskeleton. As they grow, hermit crabs occasionally must shed this exoskeleton to become larger. This shedding is known as molting. Hermit crabs also have gills, which are located near the pinchers and legs; the gills must be moist in order for the hermit crab to survive. Examples of different kinds of hermit crabs include: clarrie's hermit crab, common hermit crab, miner hermit crab (which uses hollowed rocks for protection rather than snail shells), scaly hermit crab, stridulating hermit crab, tiny right-handed hermit crab, and the land hermit crab.

BACKGROUND

Hermit crabs do not make their own shells. Instead they move into empty seashells made by mollusks, especially snails. Some species of hermit crab move from shell to shell constantly, while others only do so as they themselves grow and their borrowed shell becomes too small. The hermit crab's tail and lower legs are soft requiring the protection of the borrowed shell. The lower legs hold onto the shell. Hermit crabs also have a soft-coiled abdomen, which is also protected by the hard shell that it finds. They have four antennae, two long and two short, these are used as sense organs for hearing and smelling. They also have eyes for seeing. Hermit crabs have large pinchers and small pinchers.

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REFERENCES

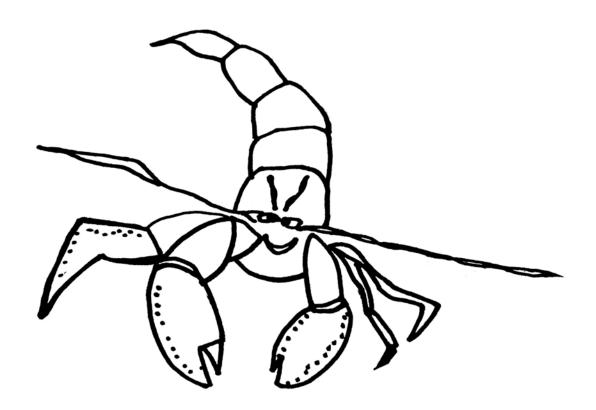
www.xs4all.nl/~pal/hermit.htm



The New Jersey Sea Grant Consortium (NJSGC) is an affiliation of colleges, universities and other groups dedicated to advancing knowledge and stewardship of New Jersey's marine and coastal environment. NJSGC meets its mission through its innovative research, education and outreach programs. For more information about NJSGC, visit njseagrant.org.

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Hermit Crab Sheet



Antenna Eye Cheliped Fifth Leg Abdomen

Draw a line from each term above (the hermit crab's body parts) to the correct location on the hermit crab drawing.

The Hermit Crab and Its Shells - Move your hermit crab from shell to shell!

