2nd Grade **30-45 minutes**

HEMIT CRAB BIOLOGY

Oregon Science Content Standards:
2.1L.1 Structure and Function: Living and non-living things vary throughout the natural world.
2.1L.1 Compare and contrast characteristics and behaviors of plants and animals and the environments where they live.
2.3 Scientific Inquiry: Scientific inquiry is a process used to explore the natural world using evidence from observations.

Ocean Literacy Essential Principles:
5. The ocean supports a great diversity of life and ecosystems.

Goals:
- To introduce students to an animal that lives on sandy beaches (in some places) and the rocky intertidal.
- To introduce students to crustaceans as a group and the traits they have in common (segmented, jointed legs, exoskeleton).
- To have the students help label hermit crab parts and make detailed observations of their live hermit crab.
- To let the students practice reading and writing answers to specific questions.

Concepts:
- Crustaceans are segmented, have jointed appendages, and have an exoskeleton.
- Hermit crabs live in old snail shells, and as they grow larger need to get larger shells.
- Hermit crabs have antennae, legs, little back legs, stalked eyes, claws, an abdomen and a carapace.

Materials:
Hermit crab/crustacean transparency, projection or drawing
Live hermit crabs (1 per student)
Plastic containers to hold groups of hermit crabs
Hermit crab diagram in and out of shell
Laminated words/parts
Tape
Hermit Crab biology worksheet

Lesson Plan:
1. Start with an informal "what we already know about hermit crabs". (Shell switching always comes up so have the students close their eyes and imagine they are a baby hermit crab, how as they grow their shell starts to feel tight and squeeze them, how they find another larger shell, how they might have to fight with another hermit crab for their new shell, how they back into the new shell, hold on with their little legs, etc.).
2. Go over a picture of a hermit crab, the word crustacean, and the traits crustaceans share (segmented body, jointed appendages, and an exoskeleton). Have the students list other crustaceans they know as you write their examples on the board. Also ask the students why it might be good to have jointed appendages? Why do we have joints in our legs? Etc.
3. Have the students make up their own important rules for handling live animals and pass out

the hermit crabs and magnifying glasses. As they observe their animals, walk around asking specific questions about the hermit crabs.

4. Have the students gather around a large drawing of a hermit crab in and outside its shell, and help you put labels on the parts (laminated labels they stick on w/ tape).
5. Last, lead the students (question by question leading at the projector) in completing a worksheet about things they might have observed (attached handout).

Assessment: Hermit crab biology worksheets, class discussion

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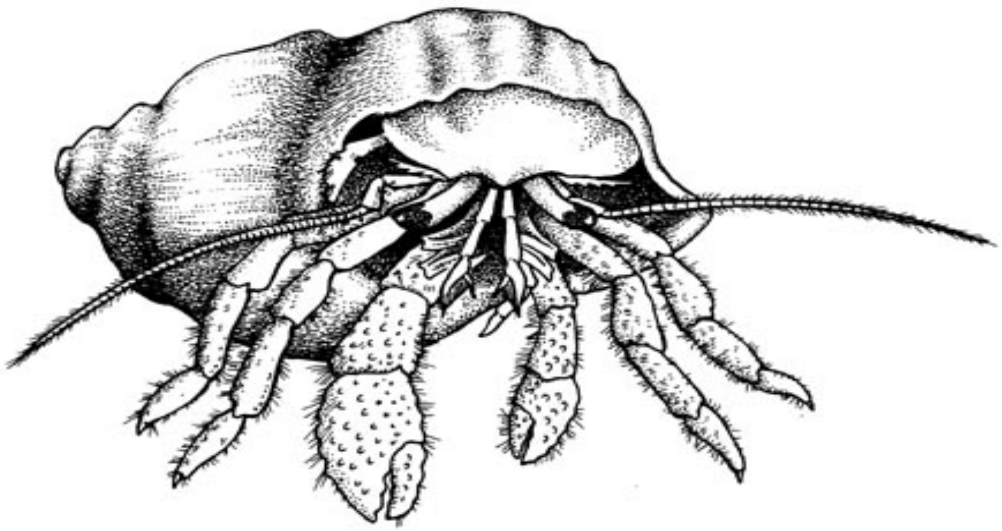
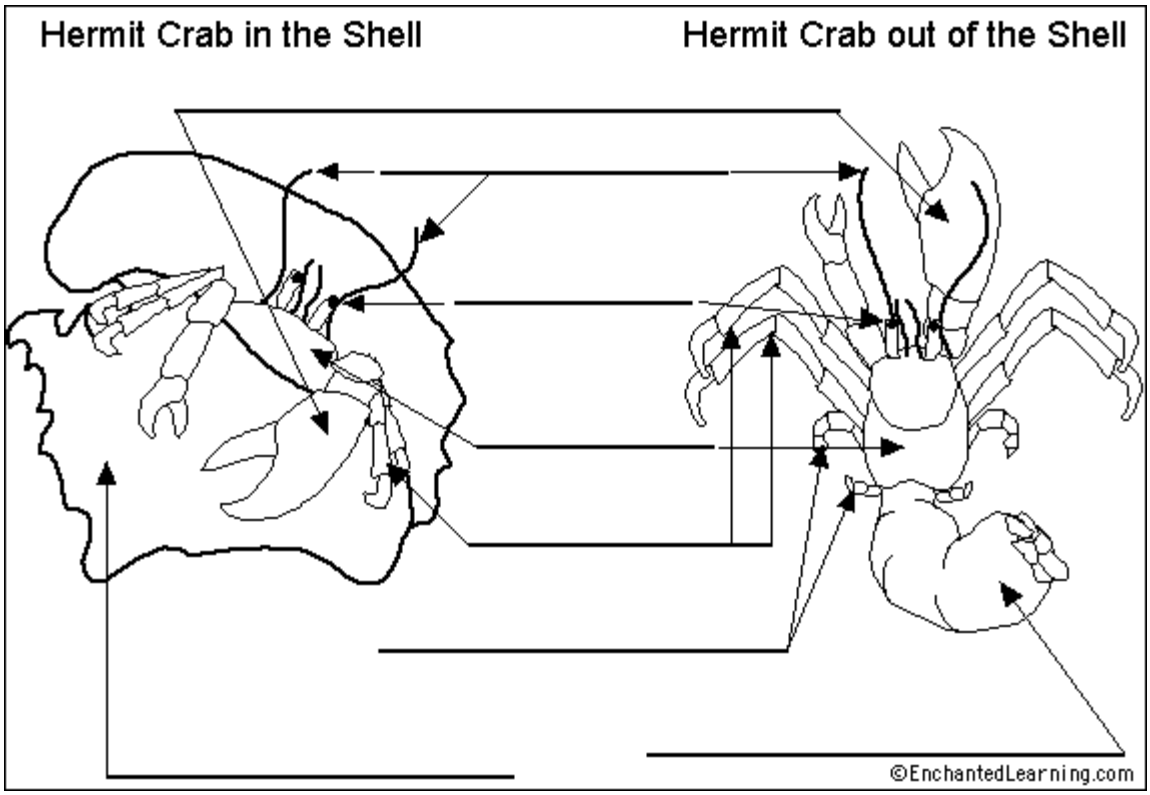
Hermit Crab



Crustacea:

- Segmented Body
- Jointed Arms
- Exoskeleton



KEY:

Claw
Antennae
Eyes
Carapace
Legs
Little legs

Shell **Abdomen**

Name:_____

What color is the hermit crab's shell?

How many legs does the hermit crab have?

What color are the hermit crab's legs?

How does it move?

How does it hold onto its shell?