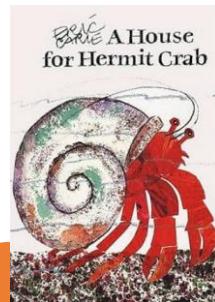


# Project-Based Learning with FDLRS, WFSU & POPIN

## Wild Kratts Hermit Crab Shell Exchange and A House for Hermit Crab



### Science Curriculum Links:

- ✓ Understand that animals depend on nonliving things in their environment to survive
- ✓ Understand that living things grow and change over time
- ✓ Understand that individuals of the same kind of animal are recognizable as similar but can also vary in many ways.

### Learning Goals- Children will:

- ✓ Distinguish the difference between living things (hermit crabs) and nonliving things (the crab's shell)
- ✓ Understand the reasons hermit crabs use shells (protection from the sun and predators)
- ✓ Learn the two main types of hermit crabs (land and ocean hermit crabs)
- ✓ Hear and understand the word *exchange*

### Vocabulary: *exchange*

**Episode:** Wild Kratts #301 [Hermit Crab Shell Exchange](#) (Note: This version has multiple advertisements throughout so we purchased it online for \$2.99).

**Book:** *A House for Hermit Crab* (by Eric Carle)

### Materials:

- Hermit crab with habitat and/or empty hermit crab shell
- Bag/towel to conceal the hermit crab
- Magnifying glasses
- Hand sanitizer for those who touch the shell/crab
- Photographs of hermit crabs with and without a shell (if not using live crabs)
- 5-8 Cardboard boxes of varying sizes, large enough to cover the children (decorated if possible as shown below)
- Orange, grey, white and black construction paper
- Large, pre-made eyes, two for each child (We used pre-printed eyes)
- Red and/or orange chenille stems, cut in half
- Staplers
- Glue sticks
- Scissors
- Laptop, screen and speakers
- Web Links:  
[BBC Crab Shell Exchange](#) Video  
[Music for Exchange Activity](#) (To play this music, we used our smart phone and a small portable Bluetooth speaker)

**Activate Learning** Direct the children's attention to the covered hermit crab (or shell) and enticingly tell children you have something to share with them. Ask them to think about what kinds of animals live in a shell (turtles, oysters, crabs, scallops...). Guide them to think about hermit crabs. Reveal the crab and tell them they will be exploring hermit crabs today!

**Read** *A House for Hermit Crab* interactively, using [Dialogic Reading](#) techniques. Emphasize the reason Hermit Crab needed to move into a new shell (he got too big). Transition to the video.

### Screening

- **Introduce** the video. Martin and Chris, the Kratt Brothers, discover a hermit crab on the beach and soon learn all about hermit crabs. Did you know there are two types of hermit crabs? While we're learning about hermit crabs to see if you can discover what the two types are!
- **Screen** the Wild Kratts episode, engaging the children in a brief inquiry at the following two places:

At **5:49**, stop and let kids respond to "What's Picky up to?" (He's looking for a new shell for protection from predators and the hot sun).

Stop again at **19:52** to ask, "Why do you think the crabs are lining up?" Take suggestions and then say, "Let's find out!"

- **Talk** after the video about the two types of hermit crabs (land and marine, or ocean). How are they different? (Ocean crabs can "breathe" underwater while land crabs cannot). Discuss the crab shell exchange. Use the word *exchange* in your discussion and encourage the children to do the same. Tell them they will play a crab shell exchange activity today!

**Activities** We divided our group of 33 preschoolers into three groups and had them rotate through these three activities. Plan on each activity taking about 10 minutes.

#### 1. Hermit Crab Observation:

Display the hermit crabs at a table. Talk about the difference between the *living* crab and the *non-living* shell. Use the magnifying glasses to allow children to get an up-close look. Emphasize the importance of being gentle! If it's not possible



to use live hermit crabs, provide large images of different crabs with and without their shells. Play and discuss some or all of the BBC hermit crab exchange video (approximately 4 minutes).



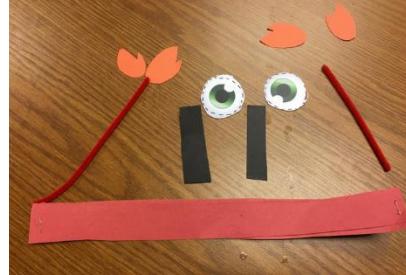
**2. Hermit Crab Shell Exchange:** In an open area of the room, have the boxes lined up from smallest to largest. As the children arrive, line the children up in order from smallest to largest. Talk about how it feels when clothes get too tight because you've grown too big for them. Compare this to a crab who must find a larger shell. Link back to the hermit crab shell exchange from the Wild Kratts episode.

Tell children they are going to pretend to be crabs and try exchanging shells like in the video. Tell them when this music plays (play a few bars) they will pretend they've grown too big for their shell and must leave it to find a bigger one.

- One by one, ask each child to climb underneath a "shell." Leave the largest shell empty.
- Cue the playful music. When the music begins, encourage the crabs to leave their shell and move into the next one.
- For added suspense, have an adult pretend to be a hungry bird looking for crabs to eat.
- If time permits, have the crabs try moving around with their "house" on their back.

Regroup and let the next set of crabs give it a try!

**3. Hermit Crab Headband Craft:** Pre-cut the pieces: Headband strips (2), chenille stick arms (2), claws (4), eye stems (2) and eyes (2). With chenille sticks placed just inside the two ends, staple two strips of orange or grey construction paper to make a headband for each child. Children can glue the claws to the top (front and back) of the chenille sticks and the eye stems and eyes onto the band.



**Closing:** Bring everyone back together and talk about some or all of the learning goals!

- Ask children if they can talk about the two types of hermit crabs (land and ocean).
- Reinforce the idea that crabs are living (why?) and their shells are non-living (why?)
- Discuss why a hermit crab wears a shell (protection from predators and the hot sun).
- Ask children to remind you the meaning of *exchange* (to switch)