Getting to Know Our Hermit Crabs
By Terri Storms
3rd Grade
Ronald Reagan Elementary

Pet Category: Aquarium/Fish

Common Core Standards:
RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
RI.3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
RI.3.5 Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.
RI.3.9 Compare and contrast the most important points and key details presented in two texts on the same topic.
3.MD.3 Generate measurement data and show on a line plot.

Objectives:
1. Students will be introduced to hermit crabs and habitat.
2. Students will complete an informational brochure by researching hermit crab facts.
3. Students will use the Popplet platform to create a thinking map of hermit crab facts.
4. Students will vote on names of classroom hermit crabs and use data to create a line plot.
5. Students will take turns caring for class hermit crabs.

Materials Needed:
-PBS video, Wild Kratts “Hermit Crab Shell Exchange”
-iPads with Popplet platform
-Pre-printed brochures
-Line plot worksheet
-Paper, pencils, crayons, markers
**Day #1: What We Know!**

Tell students that we will soon be adding some pets to our classroom and they will be hermit crabs! Before we can begin taking care of our pets, we need to learn more about them. Prompt students to take out their iPads and begin making a Popplet about their prior knowledge of hermit crabs. Students will be given 10-15 minutes to add to their Popplet. Students will then “think-pair-share” with a partner (10 minutes). Next, discuss as a class what we already know about hermit crabs. Encourage students to add to their Popplet as we collaborate together. At the end of discussion, have students submit their work electronically.

**Day #2: Video**

Instruct students that we will now watch a video that will give us more information about hermit crabs. Students are to take notes during the video. Show Wild Kratts, Season 8 Episode 1 “Hermit Crab Shell Exchange”. Afterwards, have students share what they learned. Write this on the board in the form of a thinking map. Add as many details as possible from student comments. When the thinking map is completed, have them take a photo of the thinking map with their iPads.

**Day #3-5: Research Brochure**

Pass out the pre-printed brochures to students. Tell them that now they will have an opportunity to make a hermit crab brochure explaining all about hermit crabs and how to take care of them. Refer them to the notes they have already taken, as well as the Popplet they created. They will need to research, using school approved search engines, to complete the brochure. They will be required to compare and contrast the information they locate to find the most reliable sources and facts. Their work must be neat, include at least four pictures or drawings, and include appropriate facts. (See attached example.) Allow students several days to complete this activity. Once completed, brochures will be posted on classroom bulletin board.

**Day #6: We’re Here!**

Now that the students know all about hermit crabs, it’s time to introduce the hermies to the class. Show and tell all about the hermit crab habitat, asking students to explain the importance of the various habitat components. Next, show the students the individual hermit crabs and encourage discussion, questions, etc. Explain what we need to do to take care of our hermit crabs and check for understanding. Be sure to place the aquarium in a safe place where the students can easily see them without crowding around the habitat. For the next several days encourage discussion of our new pets.
Activity #7: What’s in a Name?

Now that we have our hermit crabs and understand how to care for them, we need to give them all names. Have students carefully consider an appropriate name for one of the hermies. They will anonymously write down their idea and turn it into the teacher. The teacher will select up to ten possible names and write them on the board. The students will then again anonymously write down their vote and turn it in. Next, the teacher will draw a line plot on the board. (At this time, pass out line plots to the students as well.) Call on students to come to the board to “construct” a class line plot using the votes. Students will also create their own line plots using collected data. Once all the votes have been tallied and represented on the graph, announce the winning names of the hermit crabs and assign one of the names to each hermie. Students are to respond to the data questions, then turn in their individual line plots.

Hermit Crab Care

At this point, students have a thorough understanding of hermit crabs and how to care for them. As students show responsibility within the classroom, they are selected to be the weekly “pet helper”. They are charged with misting the tank two to three times each day as well as changing out the food and water. When their turn is over, they are to instruct the next week’s “pet helper” in how to care for the hermit crabs.

Evaluation

Students will be evaluated on their ability to complete their Popplet, hermit crab brochure, and line plot activity. See attached rubrics.

Conclusion

Having a class pet greatly motivated and encouraged my students. Not only did they learn responsibility in caring for another living creature, but they also worked hard within the classroom so that they could be chosen to take care of the pets. Students were thrilled when they noticed one of the hermies changing shells. They would also often sit by the aquarium just to watch the hermit crabs walk and climb. Having a class pet brought us together as a classroom family and created learning opportunities for both myself and my students.
Hermit Crabs

- Can die in bright sunlight
- Can not get too hot, cold, dry
- Can live for 15 years or longer
- Need clean habitat
- Have ten legs, four hold shell
- Get scared easily
- Never use soap containers, hull shell
- Are able to pinch
- Has soft body
- Social, like to be near other crabs
- Like to burrow and hide
- Body needs to stay wet

Sent from my iPad
## Popplet Evaluation Rubric

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content and Clarity</strong></td>
<td>All elements are clearly written and contain accurate facts.</td>
<td>Most elements are clearly written and most facts are accurate.</td>
<td>Elements of Popplet are difficult to read and contain many factual errors.</td>
<td>Popplet has no structure, is illegible, contains very few facts, and/or is not complete.</td>
</tr>
<tr>
<td><strong>Creativity and Design</strong></td>
<td>Time has been devoted to be creative. Popplet includes color and pictures. Structure is clear and all facts directly relate to the theme.</td>
<td>Overall work shows attempt at creativity with color or pictures. Structure is somewhat easy to follow and relates to theme.</td>
<td>Popplet is not as detailed as it should be. Some effort was given to creativity. Structure is difficult to follow and/or does not relate to theme.</td>
<td>Popplet lacks creativity and structure.</td>
</tr>
<tr>
<td><strong>Spelling and Grammar</strong></td>
<td>There are no spelling/grammar errors.</td>
<td>There are a few spelling/grammar errors.</td>
<td>There are many spelling/grammar errors.</td>
<td>There are many spelling/grammar errors which detract from the quality of work.</td>
</tr>
<tr>
<td><strong>Neatness</strong></td>
<td>Popplet is extremely neat and easy to follow with no mistakes.</td>
<td>Popplet is overall neat with few errors.</td>
<td>Popplet is not neatly arranged, has many errors, and is difficult to follow.</td>
<td>Popplet is not neat and poorly organized to the point that the reader is unable to follow the theme.</td>
</tr>
</tbody>
</table>
Important Terms

1. Molting-

2. Substrate-

3. Environment-

4. Humidity-

5. Nocturnal-

Hermit crabs can be found

Animal Name

Paste picture here

Paste picture here

Student Name
1. Melting-
skin or exoskeleton

2. Substrate-
underlying surface or layer

3. Environment-
the surrounding area that something lives in

4. Humidity-
moisture in the air

5. Nocturnal-
active or functioning at night

Hermits can be found in coastal waters, reefs, rocky areas, and on land and in the oceans.

Important Terms

AKA: Hermit Crabs

Student Name: Carlie
Care and Cleaning

To take care of a hermit crab, you will need an aquarium. You can get substrate from the pet store. Make sure you get the dirt really wet! They will need three dishes: one for fresh water, one for salt water, and one for food. Change these every day. Also be sure to mist their cage several times each day to keep the humidity high. Finally, add some extra shells and somewhere for them to hide.

Physical Characteristics

Hermit crabs are small crustaceans. They have an external skeleton and spindly legs. Hermit crabs are often called "hermies." Their bodies are soft so they live in shells. They can go entirely inside their shells and cover the opening with a big claw. This keeps them safe from predators.

Hermies are usually red or purple. They have one big claw and one small claw. They have little eyes that stick out and skinny antennae.

Habitat

Hermies like to be in small, dark places to hide from predators. They eat, drink, sleep, and play. They need both fresh and salt water. They also need lots of shells so they can move into a new shell as they get bigger. Most hermit crabs come from the Caribbean Sea area.
# Hermit Crab Brochure
## Evaluation Rubric

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content Accuracy</strong></td>
<td>All information contained in the brochure is accurate.</td>
<td>Most facts are accurate (90-99%).</td>
<td>Some of the information contained in the brochure is correct (80-89%).</td>
<td>Information in the brochure contains many factual errors. (Less than 80% correct.)</td>
</tr>
<tr>
<td><strong>Neatness and Organization</strong></td>
<td>All writing is tidy, photos and artwork are strategically placed, all sections are orderly. Brochure is attractive.</td>
<td>Most of the writing is tidy, photos and artwork are placed carefully, most of the brochure is orderly.</td>
<td>Some of the writing is tidy, photos and artwork is evident but not well placed.</td>
<td>Brochure lacks neatness and organization making the brochure confusing to the reader.</td>
</tr>
<tr>
<td><strong>Spelling and Grammar</strong></td>
<td>There are no spelling/grammar errors.</td>
<td>There are a few spelling/grammar errors.</td>
<td>There are many spelling/grammar errors.</td>
<td>There are many spelling/grammar errors which detract from the quality of work.</td>
</tr>
<tr>
<td><strong>Creativity</strong></td>
<td>The brochure as a whole is interesting, engaging, imaginative, and original.</td>
<td>Most of the brochure is interesting, engaging, imaginative, and original.</td>
<td>Some of the brochure is interesting, engaging, imaginative, and original.</td>
<td>Very little of the brochure is interesting, engaging, imaginative, and original.</td>
</tr>
<tr>
<td>Name</td>
<td>Number</td>
<td>Blue</td>
<td>Coco</td>
<td>Rusty</td>
</tr>
<tr>
<td>-------</td>
<td>--------</td>
<td>------</td>
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<td>-------</td>
</tr>
</tbody>
</table>

Draw a line plot to represent
### Hermit Crab Names

<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Hermit</td>
<td>11</td>
</tr>
<tr>
<td>Blue</td>
<td>11</td>
</tr>
<tr>
<td>Coco</td>
<td>11</td>
</tr>
<tr>
<td>Rusty</td>
<td>11</td>
</tr>
<tr>
<td>Harry</td>
<td>11</td>
</tr>
<tr>
<td>Herman</td>
<td>11</td>
</tr>
<tr>
<td>Rocky</td>
<td>11</td>
</tr>
<tr>
<td>Frank</td>
<td>11</td>
</tr>
<tr>
<td>Henry</td>
<td>11</td>
</tr>
<tr>
<td>Shelly</td>
<td>11</td>
</tr>
</tbody>
</table>

Draw a line plot to represent:

- Number of Votes:
  - 0
  - 2
  - 4
  - 6

- Names:
  - Mr. Hermit
  - Blue
  - Coco
  - Rusty
  - Harry
  - Herman
  - Rocky
  - Frank
  - Henry
  - Shelly
1. Which name was the most popular?
Blue was the most popular name.

2. Which names were least popular?
These names were least popular: Rocky, Frank, and Harry.

3. How many votes were there totally?
There were 35 total votes.

4. What are the four most popular names (names of our hermit crabs)? The four most popular names were Blue, Shelly, Herman, and Shelly. These will be the names of our pet hermit crabs.
# Hermit Crab Line Plot Evaluation Rubric

<table>
<thead>
<tr>
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<th>4</th>
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<tbody>
<tr>
<td><strong>Accuracy</strong></td>
<td>All points are plotted correctly and easy to read.</td>
<td>Most points are plotted correctly and easy to read.</td>
<td>Some points are plotted correctly and easy to read.</td>
<td>Points are not plotted correctly.</td>
</tr>
<tr>
<td><strong>Neatness and Organization</strong></td>
<td>Very well designed, neat, and attractive. Use of multiple colors make graph easy to read. Points are spaced evenly.</td>
<td>Line plot is well designed and neat. Use of colors make graph easier to read. Points are somewhat evenly spaced.</td>
<td>Line plot is neatly drawn but the graph appears quite plain and difficult to read.</td>
<td>Line plot appears messy and completed in a rushed manner. No/few colors were used. Spaces are not measured/equal distance apart.</td>
</tr>
<tr>
<td><strong>Spelling and Grammar</strong></td>
<td>There are no spelling/grammar errors.</td>
<td>There are a few spelling/grammar errors.</td>
<td>There are many spelling/grammar errors.</td>
<td>There are many spelling/grammar errors which detract from the quality of work.</td>
</tr>
<tr>
<td><strong>Labels</strong></td>
<td>Labels are creative, neat, and accurate.</td>
<td>Most labels are visible, neat, and accurate.</td>
<td>Some labels are visible, neat, and accurate.</td>
<td>Labels are missing.</td>
</tr>
<tr>
<td><strong>Data Questions</strong></td>
<td>All questions are answered in complete sentences, are thoughtful, and contain correct answers.</td>
<td>Most questions are answered in complete sentences, are thoughtful, and contain correct answers.</td>
<td>Questions are answered in complete sentences but lack accuracy and thoughtfulness.</td>
<td>Questions are not answered.</td>
</tr>
</tbody>
</table>