



# MYSTERY: WHAT IS THAT IN THE HERMIT CRAB HABITAT?

Students ask questions about the discovery of an “exoskeleton” in the Hermit Crab Habitat.

# Warm Up

## Where are YOUR bones?

We will play the game: Touch Your Bones. When I say which bone to touch, you use your hand to touch that part of your body.

- elbow bone
- ankle bone
- rib bone
- wrist bone
- knee bone
- nose bone
- finger bone
- head bone
- toe bone
- hip bone
- tummy bone ? WHAT?
- tongue bone ? WHAT?

# What We Will Do Today

- We will hear a mystery. Something happened in the Hermit Crab Habitat last night and we are going to see if we can figure out what happened.
- We will collect information. We will go into 3 different places in the classroom (called learning stations) where we will collect different types of information.
- We will review all of the information that we collected. As a class, we will see what new information we have to help solve the mystery.
- We will make guesses (called hypotheses) about what happened in the Habitat last night.
- We will plan what we need to do to see if your guesses are correct.

# The Mystery



Stewie!

I was very afraid this morning! I found this in the habitat! It is crunchy, hard, and it does not move!

Where is his shell? Why is he naked? What is this? What could have happened to Stewie?

## What We Know

From the information I have given and from what we have already learned about our Hermies, what do we KNOW? Let's create a list of at least 5 things on our worksheet.

# Our Worksheet:



KNOW	WANT TO KNOW	LEARNED
1.	1. How	Reading
2.	2. When	1.
3.	3. How long	2.
4.	4. Why	3.
5.	5. Where	Listening/Watching
		1
		2.
		3.

# Collecting Information!

- We need to find out what happened, so let's collect information.
- We will go to 3 different places:
  - The reading station where we will read about Hermit Crabs.
  - The listening station where we will watch a video.
  - The writing station where we will write down some questions that need answers.

## At the Reading Station:

- You will find copies of an article that explains information about shells, because we know that Stewie has a shell. Maybe that shell has something to do with what happened to him.
- Read the article and then fill in your worksheet with 3 facts that you learned.

# The Reading

- Shell Facts
- A shell is a hard outer layer, which has evolved in a very wide variety of different animals, including molluscs, sea urchins, crustaceans, turtles and tortoises, and armadillos. See the fact file below for more information about shells.
- Common types of shells include sea shells, snail shells, turtle shells and eggshells.
- There are more than 50,000 varieties of mollusk shells. Some open like clam shells, while others are shaped in a spiral and have a single hole where the animal enters and exits the shell.
- Seashells are the external skeletons of a class of marine animals called Mollusks. People and mammals have their skeletons on inside of their bodies, but mollusks have their skeletons on the outside.
- Seashells are primarily made of calcium.
- Shells protect the creatures from predators, strong currents and storms.
- Shells also help camouflage some animals.
- Some seashells have holes in them. The holes were made by predators who drilled or chipped their way through the shell to get at the animal inside.

## At the Listening Station:

- You will see an iPad at this station. It is ready to play a video for you.
- Watch the video 2 times. Listen for the important clues.
- Write at least 3 things you learned from the video on your worksheet.

Link to video: <http://www.howcast.com/videos/514086-why-do-tarantulas-molt-pet-tarantulas/>

## At the Writing Station:

- You will see flashcards with 5 different question words.
- Write at least 1 question that you have about Stewie and the mystery on your worksheet.
- At this station, there are pictures that will help you think of excellent questions to ask.

## Let's Review Our Clues!

- From the Reading Station. What did you learn?
- From the Listening Station. What did you learn?
- From the Writing Station. What are your questions?

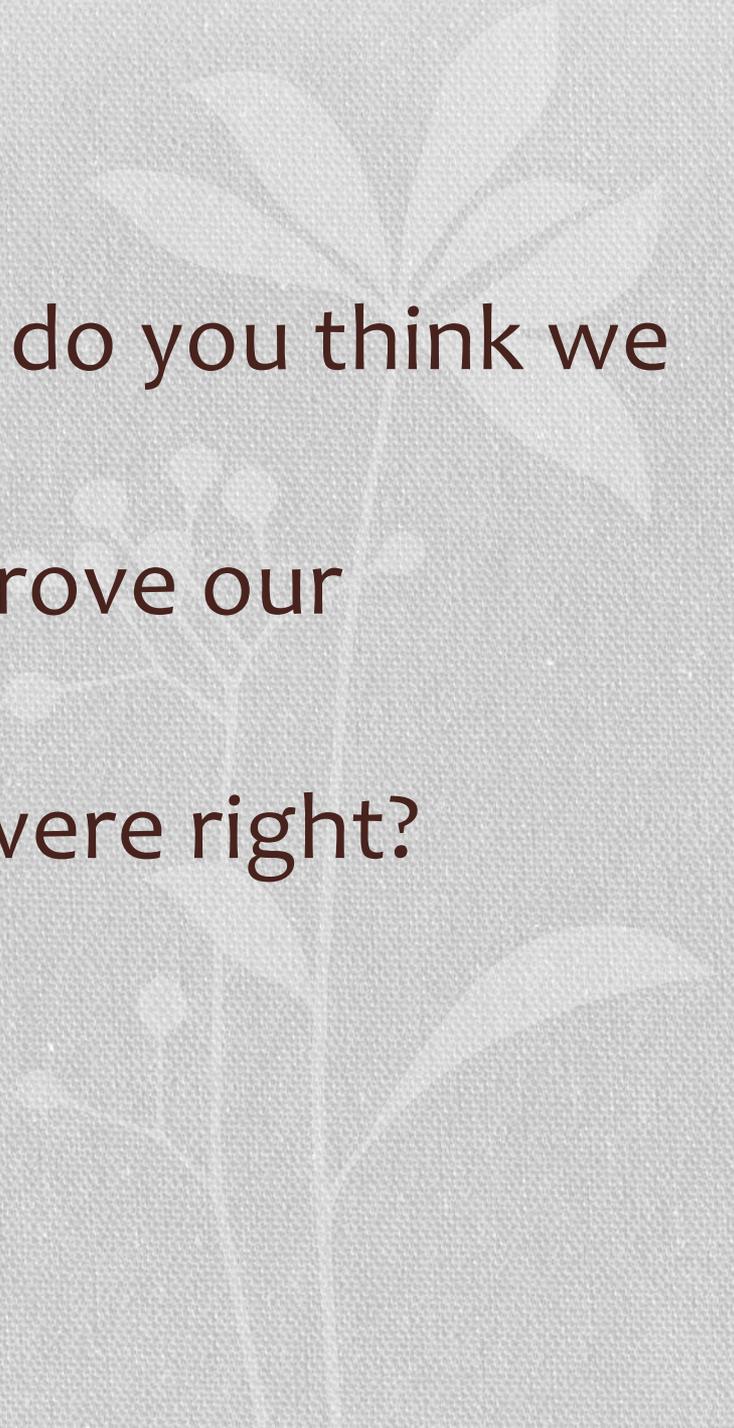
## What you: know, want to know, learned

- You filled out a worksheet that has 3 different columns. This is where you took some very important notes.
- In the “KNOW” column, you wrote what we already know about Stewie (and the other hermies).
- In the “LEARNED” column, you got information from the article and from the video.
- In the “WANT TO KNOW” column, you wrote your important questions.

# What Guesses Can We Make?

A guess that you make that is based on information is called a “hypothesis”.

- What hypothesis can you make?
- Be sure to add 3 pieces of information that supports your idea.
- Example: I see a lunch table in the cafeteria that has a tray on it with a full lunch, but no one is sitting there. My hypothesis is that a student left the table to get something from the snack line. The information I have is:
  - 1. The snack line just opened for sales.
  - 2. The lunch for today is not very tasty (grilled cheese!!!)
  - 3. The table has a bunch of boys and boys are usually very hungry.

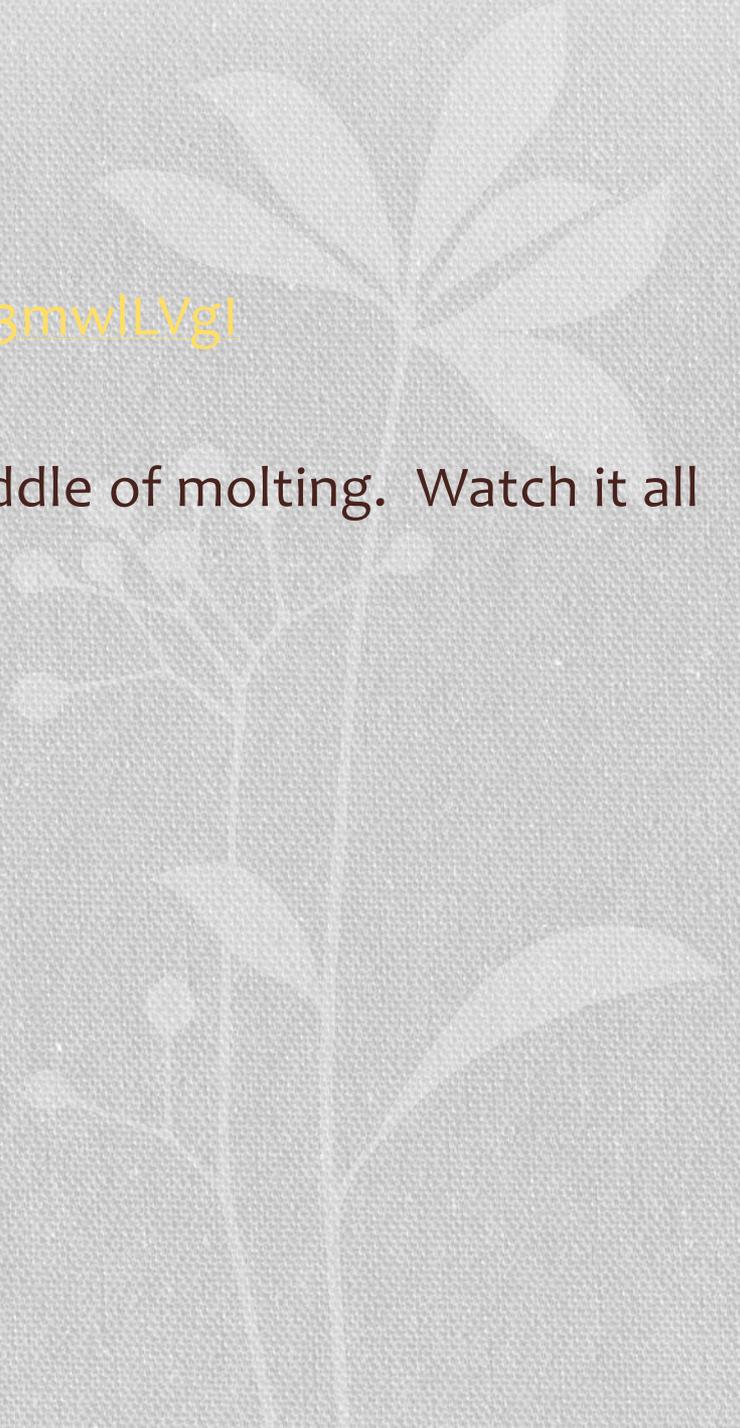


What do we do next?

- As a good scientist, what do you think we should do next?
- How do we prove or disprove our hypotheses?
- How will we know if we were right?

# And the answer is:

- <https://www.youtube.com/watch?v=6q53mwlLVgI>
- This video shows a hermit crab in the middle of molting. Watch it all or just some of it!



## The 5 Question Words

- How...
- When...
- How long...
- Why...
- Where...

