First Grade- Animal Homes

Standards

**Life Sciences 1** - Living things have basic needs, which are met by obtaining materials from the physical environment.

**Science Inquiry & Application** - Observe and ask questions about the natural environment

Objectives

Students will…

- Make observations and record them in their notebooks.
- Share their ideas with the class.
- Explain why animals build homes.
  - Use the four vocabulary words in their explanation
- Describe how beavers build dams.

Vocabulary

Habitat
Build
Materials
Shelter

Materials

Access to the three books in the lesson, as well as the optional text set provided below.

- Baking pans
- Clay or Play-Doh
- Popsicle sticks
- Large paper or whiteboard
- Markers

Text Set

*The Home Builders* by Varsha Hajaj
*We Build Our Homes* by Laura Knowles and Chris Madden
*Homes in the Wild: Where Baby Animals and their Parents Live* by Lita Judge
*Orangutans Build Tree Nests* by Elizabeth Raum
*Peep Inside a Beehive* by Anna Milbourne
*Trapdoor Spiders* by Claire Archer
*The Weaver* by Qian Shi
*Bird Builds a Nest* by Martin Jenkins
*Ocean Life Up Close: Clownfish* by Kari Schuetz
Session One

1) Hook: Read the book *Fort Building Time* by Megan Wagner Lloyd. You can find a read-aloud on YouTube here: [https://www.youtube.com/watch?v=EMPt22t_tKM](https://www.youtube.com/watch?v=EMPt22t_tKM). Before reading, ask the students to raise their hands if they like building forts. Ask them what *materials* they use to build their forts. Define the word *materials*. Then, tell the class to pay attention to the materials the kids in the book use to build their forts. Read the book. After reading, have a conversation about the materials the kids used to construct their forts. How did the materials change with the seasons? (10 minutes)

2) Explain that like humans, many animals build their own homes. They use materials they find in their *habitat*, or the place where they live in nature. Define the word *habitat*. Talk about the characteristics of a *habitat*: resources, weather, other animals, etc. Ask the students if they can think of any animals that build their own homes. (5 minutes)

3) Go outside on a nature walk. See if the students can spot any animal homes like birds’ nests or bunny burrows. If possible, have students draw pictures of what they see in their notebooks. (15 minutes)

4) When you return, ask the students why animals build homes. Introduce the term *shelter*. Discuss how homes provide shelter: warmth, safety from predators, and a place to raise their young.

5) Comprehension check: ask the students to describe the habitat in the ‘winter’ panel on pages three and four of *Fort Building Time*. What is the weather like? What animals and plants do you see in the picture? What materials from nature did the kids use to build their fort? (5 minutes)

Session Two

1) Read the book *Build, Beaver, Build!* by Sandra Markle. (10 minutes)

2) Time for a game! This is a story-song about a family of beavers who defeat the water witch and save their home. While the teacher tells the story and sings, the students act out the actions the teacher describes. Here are the tunes for each song:
The Enchanted Beaver Dam: A Story-Song

There once was a family of beavers who lived in a big pond deep in the woods. They had moved there in the spring and found an old dam in the middle of the pond. They decided to live there and keep building the dam until it crossed through the whole pond. In the summer, the parents taught the five baby kits to gnaw tree bark. As they nibbled, they sang:

Oh this tree bark is delicious! We are growing up so fast!
(The beavers’ song, version 1)

Seven students pretend to eat tree bark.

In the fall, the parents taught the baby kits to dig up mounds and bring sticks to the dam. As they worked, they sang:

We are beavers, hard at work! Bringing sticks to build our home!

Seven students pretend to dig and build their dam.

In the winter, the baby kits helped the parents drag sticks from their store of food into the cozy dam.

The water’s freezing, but we swim, because we must bring this food home!

Seven students pretend to swim and eat the sticks.

In the spring, three new baby kits arrived, and their mom wove them three necklaces from the green reeds that grew at the edge of the pond. “To protect our family,” said their mom, and all ten members of the beaver family smiled, each wearing their own necklace.

Ten students act out this scene.

But the beaver dam was getting crowded, so the family got to work felling trees and adding on to their home. Soon, the dam was nearly finished- but there were no more trees around the pond!

Ten students pretend to chop down trees and build their dam.

So while the beaver parents stayed home to take care of the three babies, the five big brothers and sisters left to explore the woods and bring back the last pieces of wood for their dam.
Five students pretend to explore the woods.

The brothers and sisters felt nervous because they had never ventured so far into the woods without their parents. As they walked, they sang to cheer themselves up:

> We are walking through the forest and we’re kind of scared, but still, we must bring back the materials to build our dam with skill!

(The beavers’ song, version 2)

It wasn’t long before the brothers and sisters reached the edge of the clearing, where ten big trees stood tall and swayed in the breeze.

Ten students pretend to sway like trees.

The beaver kids felt happy. But as they got closer to the trees, the gentle breeze became a sharp wind, and in the rustling leaves they heard a whispered song:

> We are a beaver family. We onced lived in the dam, but when we built the last piece of wood, the water witch swept it away.

> She trapped us in these oak trees, but her power comes from the reeds. The necklaces around your necks will keep you safe from her powers.

> The water witch is listening, so we must continue to sing. But if you fell these trees where we dwell, together we’ll defeat this witch.

(The witch’s song)

The brothers and sisters were more scared than ever! But they looked at each other and nodded. Then they began to gnaw on the tree trunks. They chewed a circle around the bottom of each tree. As each tree fell over, the tree stump disappeared and a beaver took form!

The students pretending to be trees now pretend to turn into beavers.

Each beaver rubbed their eyes, stretched their arms, and blinked. They smiled at the five brothers and sisters, who stood there amazed! But through it all, the song never stopped, and the beavers continued to sing:

> We thank you for this freedom, you’ve turned us back to beavers. But our task is not done, the battle’s yet to be won, and now we return to the pond!
All fifteen beavers scampered to the pond as fast as they could. Now that they had stopped singing, the witch knew that the beavers were free! So they had to be quick. They dragged the branches from the trees to the pond’s edge, where the reeds began to rustle.

_The fifteen students pretend to bring more branches to the pond._

The necklaces around the brothers’ and sisters’ necks began to glow. The beaver family they had rescued dove into the pond and swam desperately into the dam, where they would be safe.

_Ten of the students pretend to dive and swim into the dam._

It was now up to the five brothers and sisters to save the dam!

The brothers and sisters packed the branches onto the dam, sticking them together with mud and leaves. They worked faster than ever. If they could finish the dam, the witch would have to leave the pond forever!

_Five of the students pretend to pack branches onto the dam._

Behind them, the reeds rustled and wove themselves together until they took the shape of the witch! She had long reedy hair that floated on the water, and her fingers stretched out into reeds that reached toward the dam. Her fingers grew slowly but steadily, and as they grew, the witch sang:

_I’ve woken from my slumber, you’ve stolen the pond from me, so now I’ll reach and with these reeds, I’ll break up this dam to smithereens!_

_(The witch’s song)_

The brave beavers answered back:

_This is our home and we love it, ‘cause we built it all from scratch! We have freed the other family, you cannot make us leave!_

_(The beavers’ song, version 2)_

Suddenly, the beavers’ parents, their three baby siblings, and the whole beaver family from the trees emerged from the dam. They stood on top of the mound, dancing and singing even louder:
This is our home and we love it, ‘cause we built it all from scratch! We have freed the other family, you cannot make us leave!

_The fifteen other students dance and sing._

As one of the sisters laid the last branch on the mound, the witch’s reeds reached the dam. But the dam was finished and built stronger than ever, so the reeds simply cascaded over the dam, weaving in and out of the sticks. The witch’s song faded away and the reeds that formed her body collapsed into the water. The beavers cheered and admired their home. The reeds were the perfect finishing touch to the dam, adding a beautiful color and extra protection to the roof- and the witch had done it all for them! Both of the beaver families were overjoyed. Now the dam had enough room for both families, and they all lived happily ever after.

_Everyone cheers! The end!_

(15 minutes)

3) Comprehension check: pass out pencils and paper.
   a) Ask the students to draw a picture of what beavers eat.
   b) Ask the students to draw a picture of a beaver dam.

(5 minutes)

Session Three

1) Hook: Ask students to show you beavers munching on tree bark. (The students should act this out as a review from the last session). Ask the students to show you beavers felling trees. Ask the students to show you beavers hiding from predators inside their dam.
   (1 minute)

2) Read _Beavers Build Lodges_ by Elizabeth Raum.
   (5 minutes)

3) Do the activity at the end of the book- making your own model of a beaver dam! Pack clay or Play-Doh into a baking pan. Use Play-Doh to make a dam and add popsicle sticks. Pour water into the pan and see if your dam holds up!
   (20-30 minutes)

4) Formative assessment: The teacher will guide the students through writing a class poem using the four vocabulary words.

North America is covered in forests full of many creatures
These woods are the ___(habitats)___ of lots of busy beavers
Who live in ___(adjective)___ ponds, marshes, rivers, and lakes
And **(build)** giant dams, no matter what it takes
Lots of grit and hard work is needed to make
A sturdy home where they can sleep, eat, and wake
And, if a predator comes near, make a speedy escape
The dam gives them **(shelter)** from all kinds of things
Whether it be summer, fall, winter, or spring
And the beavers love to **(activity)** in the water
When they’re not building their dam even stronger
Using their **(adjective)** teeth to chop down nearby trees
And adding to their dam piece by piece
Making use of the natural **(materials)** in their habitat
Now the beavers are all done with their dam- look at that!