



*Revised 4/16/20
Neal Smith National Wildlife Refuge*

Investigating the Invisible

1st Grade

60 Minutes

Spring

Summary

After examining animal camouflage examples in the book *How to Hide a Butterfly* by Ruth Heller, students identify camouflaged animals in the book and practice naturalist skills such as being quiet and full of wonder as they listen. Next, students discuss the definition of camouflage and what it means to them in their own words. They make predictions and ask questions about how animals might camouflage in the prairie. Afterwards, they go outdoors and search for examples of camouflaged animals. Students reflect upon their discoveries and why camouflage might be important for prairie animals.

Next Generation Science and Iowa Core Standards

Next Generation Science

- **1-LS1-1**
 - Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- **1-LS1-2**
 - Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

Literacy

Reading

- **RL.1.1**
 - Ask and answer questions about key details in a text

Writing



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- **W.1.8**
 - With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Speaking and Listening

- **SL.1.1**
 - Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- **SL.1.2**
 - Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- **SL.1.6**
 - Produce complete sentences when appropriate to task and situation.

Materials and Resources

- *How to Hide a Butterfly* by Ruth Heller (optional)
- Examples of animals using camouflage
- Felt board and animals
- Blank paper or nature journals
- Pencils
- Clipboards

Presentation

Post pictures of animals using camouflage on the board. Ask students what the animals are doing. Why are they hard to see? Write the word “Camouflage” on the board. Ask students to share what they know about camouflage. Discuss that camouflage is when animals hide by blending in with their environment. What prairie animal families do you think you will find outside?

Directions

1. Hang up the felt board on the “oak savanna” side. Instruct students that



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they are going to practice camouflage by hiding animals on the felt board. Instruct students they must hide the animals in plain sight, they cannot put them underneath anything.

2. Ask for volunteers to take a turn hiding an animal. Deliberately choose animals with colors that blend in, and some that don't. Instruct students to close their eyes and count to ten while the student hides their animal. Give students ten seconds to try to locate the animal. If they find it, instruct them to cover their mouths. After ten seconds, have the student reveal their hidden animal. What made it easy? Were some colors hard to blend in with?
3. After several tries, switch to the "prairie" side of the felt board. Repeat the process. Which side was easier? What color do you think animals would want to be to camouflage on a fall prairie?
4. **Alternative activity:** In the book *How to Hide a Butterfly* by Ruth Hellers, animals become nearly invisible because they are so well camouflaged. Before showing students the illustrations, tell students they will look carefully on each page to find a picture of animal in its environment. If they find the animal, they should put their hand over their mouth to show that they know what it is. They should not to point at the animal or shout it out because that would ruin it for everyone else in the class.
5. Open the book to the first picture and walk around the classroom so that each student has chance to find the animal. Once everyone has viewed the picture, then ask one student to show you where they spot the animal. Choose a few more animals to show the students and repeat these steps.
6. After the felt board activity or reading the book, ask students to define camouflage in their own words to ensure they understand the concept.



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7. Next, explain to students that they will be searching outside for animals that blend into their environment using camouflage. They will have to look very closely to find animals that are camouflaged. Ask students to predict how animals might camouflage on the prairie. Provide them with examples.
8. Pass out a clipboard, paper and pencil to each student. Explain that when students find a camouflaged animal, they should draw that animal in its environment and write down how it is camouflaged.
9. Remind students to behave like naturalist- people who are quiet, curious, full of wonder, explorers- while they are outside.
10. Once outside, give students clear boundaries to observe camouflaged animals. Remind them that their success will depend on how quietly they search. Students spread out, observe creatures, draw animals found, and write about its camouflage. After about 10 minutes of exploration, call students back to line-up.
11. Take the students back inside. Have students raise their hands to share their discoveries about camouflaged animals.



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Resources

Journal Prompt



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NSNWR
Weather
Temp

Name

Date

Time

Camouflage



← I think the
moth I found is
using colors that
match the prairie
plants to camouflage.
I think the
shape of its wings
matches the leaves
on the plants which
also helps it hide.

Students should find a camouflaged animal in the prairie, draw a picture of it in its environment, and use words to describe how they think it is using camouflage.