

EDUCATOR'S GUIDE

Camouflage

Preparation

Overview and Objectives

This lesson is geared toward students in grades K-5.

Within the animal world, the ability to sneak up on prey or hide from enemies is a fundamental mechanism for survival. The collective techniques used to conceal one's presence or to visually deceive others is known as camouflage. Learning from the animal world, humans have employed camouflage in hunting and warfare. Examples of this can be found on board *Intrepid*. This program focuses on four different types of camouflage found in nature and asks participants to determine what use this type of camouflage may have for a ship or aircraft.

This lesson includes a [slideshow](#) in which an instructor can lead participants through an exploration of two supersonic aircraft. The lesson culminates with participants camouflaging various aircraft in different environments!

Standards

NEXT GENERATION
SCIENCE STANDARDS

K-2-ETS1-1

3-LS4-2

3-LS3-3

3-5-ETS1-2

Instructional Modalities

This activity was designed for both synchronous or asynchronous instruction.

For **synchronous instruction**, we recommend a platform that allows both for whole class discussion and for students to interact in small groups.

For **asynchronous adaptations**, we provide suggestions for teachers to provide additional support for the activities and for students to share their work with each other.

Materials

- [Camouflage Slideshow](#)
- [Coloring Pencils/Crayons](#)
- [Camouflage Worksheet \(p.4\)](#)
- [Camouflage an Aircraft Coloring Sheets](#)

Lesson

1. Introductory Activity

- Ask Participants:
 - **What are different ways that animals can hide in nature?**
 - **Why is it helpful for certain animals to hide?**
 - **Why might it be helpful for a military aircraft to hide?**
- Discuss the responses with the group.

2. Core Activity

- Inform participants they will be learning about camouflage and different types of camouflage found in nature.
- Look through slides 9-12 in the [slideshow](#) and have participants identify where they have seen that camouflage before. Have participants share out and ask why it might be helpful to an animal or military ship/aircraft
 - **Where might this type of camouflage be the most effective?**
 - **Where might this type of camouflage be the least effective?**
- Have participants look through the [camouflage coloring sheets](#) and color at least four planes in various environments using a form of camouflage they learned about
- Have participants share their camouflaged aircraft with a friend. What could make each aircraft's camouflage even more effective?
 - **What could make each aircraft's camouflage even more effective?**

Asynchronous Adaptation

Have participants go through the [slideshow](#) on their own. Using their [worksheet](#), participants can identify where they can see the four different types of camouflage in nature. They can then color in the aircraft in the [camouflage coloring sheets](#) to match their environments. Participants can take photographs of their work and share them with their peers in a shared folder.

Extension Activities

To deepen participant engagement with this content, you may choose to add the following activities :

Hide in an Environment

Have participants take a picture in which they try to camouflage with your environment. An example could be wearing clothes that matches your blankets. if camouflage isn't an option, you can put on warning colors! What kind of environment will make you stand out in a striking way?

Learn More about Camouflaged Aircraft

Have participants watch videos on the [Kfir](#) and [MiG-21](#) to learn a bit more about the two camouflaged aircraft on display at the Museum.

Additional Resources/ References

Smithsonian Library and Archives: From This to That: Camouflage to Conceptual Art

<https://learninglab.si.edu/collections/from-this-to-that-camouflage-to-conceptual-art/pLYyBtobaiOWv2IV>

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ACTIVITY 1: CAMOUFLAGE IN NATURE

Directions:

As you see each type of camouflage, identify where you may have seen this camouflage before in nature.

Type of Camouflage	Where might we see this camouflage in nature?
<p>Obscuring camouflage attempts to blend the object into the environment to appear invisible. The object's coloration or covering is designed to match the visual appearance of the anticipated background.</p>	
<p>Disruptive camouflage uses bright and contrasting colors which creates visual cues that confuse the camouflaged object's true features. This prevents the observer from accurately identifying key characteristics, such as shape, size, speed and direction of travel.</p>	
<p>Countershading cancels out the shading that comes from natural overhead sunlight since the object is darker on the top and lighter underneath. The result in both land and sea dwelling animals is that the animal appears flatter, which conceals their presence to predators.</p>	
<p>Mimicry camouflage makes an object appear to be something very different than what it actually is. By taking on the characteristics or appearance of something else, an animal may appear to be less desirable as a meal or even dangerous.</p>	