

MASTERS OF DISGUISE:

Learning About Camouflage



CAMOUFLAGE helps animals blend into their surroundings. Camouflage helps animals survive by making it difficult for their predators or prey to notice them. Animals can camouflage the way they look, the way they smell, and the sounds they make. Animals can use more than one type of camouflage at once!

Animals can camouflage the way they appear with **BACKGROUND OR COLOR MATCHING**, **DISRUPTIVE COLORATION**, **MIMICRY**, or **DISGUISE**.

DID YOU KNOW?

BACKGROUND OR COLOR MATCHING is when the color of an animal's body matches the color of its surroundings.

Example: The **WHITE-TAILED DEER** has a coat that changes color with the seasons to help it blend into its environment.



White-tailed Deer

DID YOU KNOW?

DISRUPTIVE COLORATION is when an animal has a pattern with more than one color to help them hide the outline of their body.

Example: The **AMERICAN TOAD** has a pattern of brown, gray, and reddish patches to help it blend into leaf litter, soil, or tree bark.



American Toad

Camouflage Challenge: Blend into your surroundings

Can you blend into your surroundings like the WHITE-TAILED DEER or the AMERICAN TOAD?

1. Think about a place you might be able to blend in. The kitchen? The living room? Your backyard?
Choose one place.
2. Ask yourself:
 - What do I need to do to blend in there? Can I make myself appear invisible?
 - Will I use color matching or disruptive coloration?
 - What color clothes will help me blend in best?
 - Do I need patterns to help me blend in?
3. Put on your background matching or disruptive coloration camouflage and go to the area where you want to blend in.
 - Should you stand, sit, kneel, lie down?
 - Should you spread your arms out to blend into tree branches?
 - Should you crouch down?
 - Do you need to stand still to blend in?
 - Do you need to move?
4. Try to blend into your environment! Can someone else see you?

What About:

- What would make your camouflage more effective?
- Does your camouflage work in more than one area?
- How has camouflage helped you?
- What is challenging about camouflage?
- Do any animals you know use color matching or disruptive coloration to blend in? What are they? How do they use it?

DID YOU KNOW?

MIMICRY is a different form of camouflage. It is when one living thing looks like another living thing that is dangerous, bad tasting, or poisonous. It is another way animals fool their predators. Animals can mimic the way other animals look, sound, or smell.

Example: The **OWL BUTTERFLY** has owl eyes on the back of its wings to make predators think they are looking at an owl and not a butterfly.

Example: The **WEST AFRICAN SAVANNA FROG** uses its scent to trick ants into thinking it is also an ant so they will not sting it.

Example: The **HARLEQUIN FILEFISH** uses scent and sight to trick predators into thinking it is coral by looking and smelling like coral.

Example: **HOVERFLIES** uses buzzing to mimic the sounds of stinging insects. They also have color patterns that make them look like a stinging wasp or bee.

West
African
Savanna
Frog



Hoverfly

Harlequin
Filefish



Owl
Butterfly

TRY THIS!

You can camouflage yourself by using **VOCAL MIMICRY** like the hoverfly. Try mimicking someone that lives with you. You can imitate their voice or a sound they make like footsteps. Ask yourself:

- Is their voice deep or high pitched?
- Do they talk fast or slow?
- Do they talk loudly or softly?
- How often do they make the sound?

DID YOU KNOW?

Similar to mimicry, animals use **DISGUISE** to blend into their surroundings by using their shape, color, or texture to look like something that is not an animal.

Example: The **CADDISFLY LARVA** lives underwater and attaches grains of sand and rock to its body to make it look like a rock or sand.

Example: **THE WALKING STICK BUG** look like sticks with legs and antennae, or twigs attached to a small branch.



Caddisfly larva with pebbles on body



Adult Caddisfly



Walking Sticks

Can you use MIMICRY or DISGUISE to camouflage yourself by looking like a different animal?

What animal would you like to mimic?

What animal would you like to disguise yourself as?

Can you think of an animal that might be dangerous, bad tasting, or poisonous?

Camouflage Challenge: Make an ANIMAL MASK

What animal would you like to mimic?

Materials:

- 1 paper plate (or thick sheet of paper)
- Scissors
- Yarn/ribbon/string or straw/craft stick
- Hole puncher (optional)



What you might use to decorate your mask:

- *Colored paper
- *Glue
- *Tape
- *Markers
- *Colored pencils
- *Crayons
- *Glitter
- *Feathers

Can you think of other things to use?

Directions

1. Make 2 holes for eyes
2. Use the whole plate/paper or cut it into any shape you want
3. Decorate your mask.
4. There are 2 ways to wear your mask:



Using ties

- Use the hole puncher or scissors to punch a hole on each side of the mask near the edge and opposite the eye holes
- Cut 2 pieces of yarn, ribbon or string about 10 inches each. Tie 1 piece into each hole. When the mask is finished put it on and tie the strings behind your head

Using a straw or craft stick

- Glue the stick/straw to the backside of the mask. Use it as a handle to hold the mask in front of your face,

What about:

- What are your animal's characteristics? What does it look like?
- How does your animal keep predators away?
- Where does your animal live?
- What does your animal eat?
- Is your animal nocturnal (active at night) or diurnal (active during the day)?
- How does your animal move?
- Can you move like your animal?
- Does your animal mask include any other types of camouflage besides mimicry?