

Now You See Me, Now You Don't

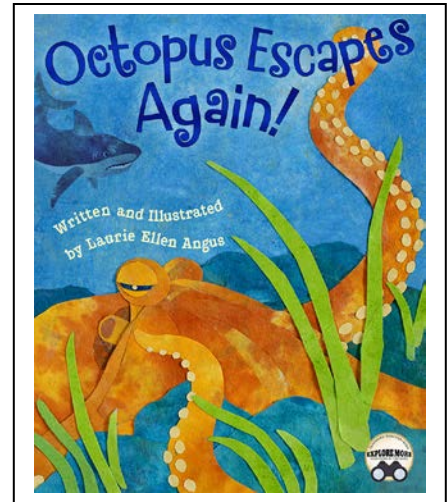
Introduction

In the book *Octopus Escapes Again*, children are introduced to the defense mechanisms that octopuses use to help them escape from danger. In this demonstration, young children get an experience with how ink helps an octopus hide from predators.

(Grades PreK-1)

Materials

- The book *Octopus Escapes Again*
- Black tempura paint or food coloring put into a small container
- Eyedropper
- Clear glass vase or other container filled with water
- An object to put in the vase, ideally a plastic toy octopus.



Procedure

1. Teacher Prep: Read aloud *Octopus Escapes Again*. Ask children to recall what the octopus did to escape from danger. Return to the story and look carefully at the illustrations that show the octopus using one of its defenses.
2. Tell them they're going to experience what it's like to look for an octopus after it squirts its ink.
3. Put the toy octopus in the bottom of the vase of water. Have them notice how easy it is to see the octopus.
4. Have children come up one at a time and use the eyedropper to transfer the colored water to the vase. (Water transfer with an eyedropper helps develop a fine motor control.) After each addition, ask, "Can you still see the octopus?" Continue adding black water until the octopus is very hard to see.

Standards Alignment

Next Generation Science Standards (DCI: K-2)

LS1: From Molecules to Organisms:

- (A) Structures and Processes
- (B) Growth and Development of Organisms
- (C) Information Processing

Common Core ELA (K-2)

Reading: Informational Text

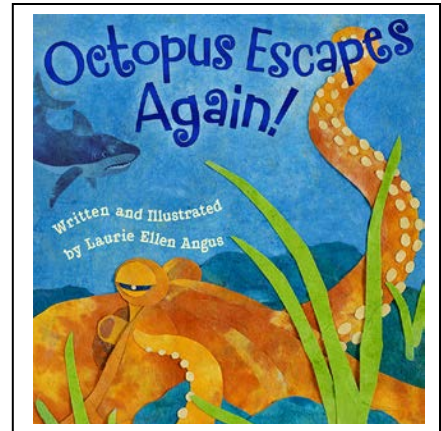
Key Ideas and Details: K.1, 2.1, 3.1

Integration and Knowledge of Ideas: K.7, 1.7, 2.7, 3.7)

Take a Closer Look

Introduction

In the book *Octopus Escapes Again*, children are introduced to the defense mechanisms that octopuses use to help them escape from danger. One of the octopus's amazing defenses is its ability to completely camouflage itself. In this lesson, adapted from discoveryeducation.com, children create an animal that is camouflaged. (Grades K-4)



Materials

- The book *Octopus Escapes Again!*
- Colored poster board or large sheets of colored construction paper, 1 per group
- Various colors of construction paper and patterned paper, enough for all groups
- Scissors, glue, and tape for each group

Procedure

1. Teacher Prep: Prepare imaginary “background environments” using construction paper and other paper, such as various sizes of black polka dots on white poster board, or brown stripes on blue construction paper. Make enough different environments for each group.
2. Read aloud *Octopus Escapes Again!* Ask children to recall what the octopus did to escape from danger. Carefully look at the illustrations that show the octopus using its defenses and discuss the sidebar information.
3. Divide the class into groups, giving each group one of the "background environments." Challenge the groups to use the materials you've provided to create imaginary animals that will be camouflaged when glued onto their environment.
4. Have each group choose a “predator” to try to find the animals hiding in the other groups' environments. The predator may stand on a steady chair, looking down at the "environment," trying to spot as many "animals" as possible in five seconds.
5. Conclude by discussing what made the camouflaged "animals" difficult to spot. Was it their shape, patterns, colors, or a combination of all three?

Standards Alignment

Next Generation Science Standards (DCI: K-3)

LS1: From Molecules to Organisms:

- (A) Structures and Processes
- (B) Growth and Development of Organisms
- (C) Information Processing

Common Core ELA (K-3)

Reading: Informational Text

- Key Ideas and Details: K.1, 2.1, 3.1
- Integration and Knowledge of Ideas: K.7, 1.7, 2.7, 3.7)