

## “Something’s Fishy Puzzle” lesson plan

Duration: 20-40 minutes

Objectives:

- Students will be introduced to five different fish species found in the Ottawa area
- Students will identify the physical characteristics of various animals and explain how these characteristics help animals meet their basic needs
- Students will learn what different fish species have in common and what makes them unique
- Students will understand how the different features of a fish can be used to identify the species of fish

Background:

There are many different fish species found in the Ottawa area. Recognizing the common and unique characteristics of fish is important for both species identification and understanding what physical features a fish needs to survive. This activity will help students identify local fish based on their physical characteristics such as colour, pattern, body shape, fins, tail, mouth, and gills.

Materials:

- Plush fish: Yellow Perch, Walleye, Largemouth Bass, Brook Trout, and Sunfish
- One set of “Fish Puzzles” per pair of students (Note: each set contains puzzle pieces for two fish)
- Two sheets of paper per pair of students
- Glue
- Two writing utensils per pair of students (pencil recommended)

Procedure:

1. As a class, find similarities and differences between the various plush fish. Look at features of the fish such as their colour, pattern, body shape, fins, tail, mouth, and gills. Ask the students why some features are common amongst all the fish and why some features are unique to individual species. Discuss the importance of these features and how they help the fish survive. For example, all fish have tails to help them move but tails can differ in shape and size between species. Why might this be? How can some features help us to identify a species of fish? Be sure to include all five plush fish species (and their names!) in your discussion. Please see the Appendix for additional information and resources, if needed.
2. Give each pair of students one set of “Fish Puzzles” and two sheets of paper. Have students work with a partner to sort through the puzzle pieces and complete each of the two fish puzzles. Then have students glue the pieces for each completed fish puzzle onto construction paper such that each fish is glued on its own paper.
3. Have students match their completed fish puzzles to the plush fish discussed earlier by writing the name of the fish they made on their paper.
4. Ask students to share what strategies they used to complete their puzzles and to identify which fish they made.

## Appendix – Additional Information and Resources

Examples of physical characteristics of fish found in the Ottawa area:

- A. **Colour/Pattern:** The colour and pattern of fish often reflect their habitat to help fish blend in with their lake and avoid predators. In addition to camouflage, the colour of fish can also help with mate selection and maintaining body temperature.
- B. **Body Shape:** Fish with elongated bodies, such as Walleye, Brook Trout, and Largemouth Bass, are predators because they can move quickly to catch their prey. These fast swimmers “lie and wait” for their food before quickly catching them. Alternatively, fish with smaller bodies, such as Yellow Perch, tend to be lower on the food chain and must be able to hide easily.
- C. **Fins:** Walleye, for example, have extra fins that aid in mobility making the fish more vertically stable and able to move faster in the water (like a boat rudder). While Brook Trout have soft fins, Walleye have fin spines that act as a defence mechanism for protection against predators. Sunfish require larger fins to stay upright while swimming due to their round and flat body shape.
- D. **Tail (Caudal Fin):** Fish have tails of various shapes to help them move through the water, much like a boat motor. A forked tail helps fish like Walleye, Yellow Perch, Largemouth Bass, and Sunfish swim fast. A truncated or flat tail helps fish like Brook Trout turn quickly, for example, when living in a river with less space than is found in a lake environment.
- E. **Mouth:** Walleye and Largemouth Bass, for example, have large, sharp teeth because they are top predators that hunt larger prey like frogs and other fish. Since Yellow Perch do not have sharp canine teeth, they force their food down instead of chewing. Brook Trout have no teeth on the roof of their mouth.
- F. **Gills:** Smaller fish have smaller gills, while larger fish have larger gills.

For additional resources, please check out:

- [www.ontario.ca/page/fishing](http://www.ontario.ca/page/fishing)
- [fishingworld.ca/pages/ontario-fish-species](http://fishingworld.ca/pages/ontario-fish-species)
- [www.ontariofishes.ca/home.htm](http://www.ontariofishes.ca/home.htm)
- [files.ontario.ca/environment-and-energy/fishing/198234.pdf](http://files.ontario.ca/environment-and-energy/fishing/198234.pdf)