STUDENT GUIDE

# Fishy Facts!

Fish are **aquatic** animals. That means they live in water. Some live in freshwater, some live in saltwater. And some can live in both. Even though fish come in all different shapes and sizes they have many things in common.

**Backbone** - all fish have a backbone that gives them support down their entire body.

**Ectotherms (cold-blooded)** - fish cannot control their own body temperature. They have to use their environment. When they are in cold water, their body temperature goes down. In warm water, it goes up.

**Eyes** - many fish have excellent eyesight. They use their eyes to hunt for food and watch for predators.

**Fins** - help fish swim through the water. Like a submarine, fish can moe forward, backward, up, down and sideways with the help of their fins.

**Gills** - instead of lungs, fish breathe through gills, small slits located behind the head.

**Jaws** - used for catching food. Some fish eat insects, some eat plants and some eat other fish

**Mucous** - slimy covering on a fish's body that helps protect it from disease.

**Scales** - cover the body of the fish and protect them from injury and disease.

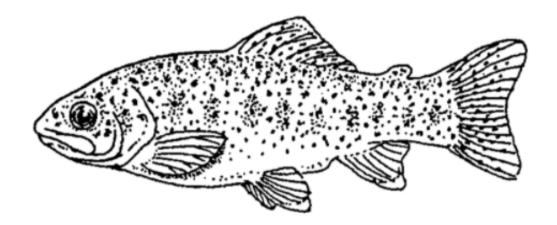
**Sense of smell** - helps the fish find food and warn them of nearby dangers.



# Feature Fish 1:

The fish below is the Apache trout. Did you know that the Apache trout is the Arizona's official state fish? It can grow up to 24 inches long and feeds on insects. It is golden yellow with dark spots.

Color the fish and label these important fish features: eyes, fins, gills, jaws and scales.



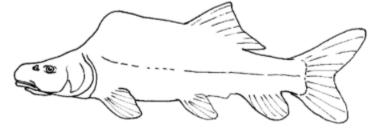
# Feature Fish 2:

The razorback sucker is named for the sharp keel or hump on its back.

The hump helps the razorback sucker stay on the bottom of a river during floods so it doesn't get washed away.

Razorbacks feed on plants and insects at the bottom of streams or rivers.

Color the fish and answer the questions below.



Why do you think it is called the razorback sucker?

Describe the habitat where you would likely find razorback suckers?

## TEACHING GUIDE

### Overview

In this activity, students will read a short passage to learn the characteristics of fish. Then, they use that information to label a drawing of fish and answer some questions.

# **Suggested Procedures**

- 1. Print the worksheet above. If possible, print it double sided.
- 2. Ask students to read the short passage.
- 3. Once they have read the passage, have the students complete the Feature Fish 1 section. They should label the different parts of the fish. Discuss the answers as a class. If possible, draw a fish on the board and have different people come up to label the parts.
- 4. Discuss their answers.
- 5. Have the students complete the Feature Fish 2 section.

  Discuss the answers as a class. Students should be able to use their knowledge of the razorback that was presented in the reading material to describe the habitat as a fast moving river such as the Colorado River.
- 6. To recap, have the students answer the following questions:
  - What does ectothermic mean? Can you identify any other animals besides fish that are ectothermic or cold-blooded?
  - What two body coverings help protect the fish?
  - What is Arizona's state fish? Can you name any of Arizona's other official symbols (e.g., mammal or bird)?

#### Grade

1st

#### **AZ Science Standards**

• 1.L4U1.10

## **Science and Engineering Practices**

 Obtain, evaluate and communicate information

## **Crosscutting Concepts**

Stability and Change