



Baby Fish

Grade Level

Grade 1

Objectives

This activity is designed to help your at-home student recognize themselves as scientists and think critically about problem-solving. The goal is to teach concepts through discovery and to encourage using scientific thought processes. As with all lessons provided, please feel free to adapt them according to your students' abilities. Take these ideas, make them your own and your students will have a greater chance at success.

Procedures

1. Start by asking your student to think about different types of dogs. How are different kinds of dogs the same? How are they different? Can two different types of dogs, for example, a dalmatian and a poodle, have puppies together?
2. Explain that all domestic dogs are the same kind of animal, even though they look different. People have bred dogs to do certain things or look certain ways. If people wanted to have dogs that were really good at herding sheep, they would take a boy dog good at herding sheep and breed it with a girl dog good at herding sheep. They would then see which puppies were good at herding sheep and breed them with other puppies that were good at herding sheep. In this way, the sheepherding traits would be passed on to the next group of puppies. But that doesn't mean that a sheep herding dog is a different kind of animal from a dog that is not good at sheep herding. They are both still dogs.
3. Explain to your student that they will pretend that they are scientists that have just discovered a new kind of fish. Like dogs, this species may look differently depending on where they live.
4. Your student should use the worksheet to try to figure out what the offspring of different fish with different appearances might look like.

Standards

Ohio Academic Content Standards
Grade 3 Life Science Topic: Behavior, Growth and Changes Offspring resemble their parents and each other.



Baby Fish Worksheet

Congratulations! You've just discovered a new type of fish! This fish lives in a coral reef habitat.

Coral are very small animals that attach themselves to rocks. What may look like one piece of coral, is actually hundreds of individuals, called coral polyps. They live together in what is called a colony, forming one structure. A bit like how a lot of different families can live in one big apartment building.



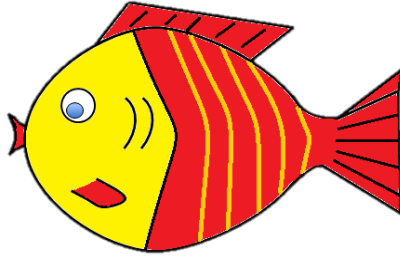
The above picture shows examples of some coral.

The type of fish that you've discovered lives in an area with different types of coral. You've noticed that some of the fish live in one type of coral and other fish live in a different type of coral. The fish colors and shapes seem to match the color and shape of the coral where they live. But even though they might look different, you know that they are the same kind of fish.

Your first step is to name the fish! Look at the different fish and where it likes to live. Scientists often name animals based on where they live or what it looks like.

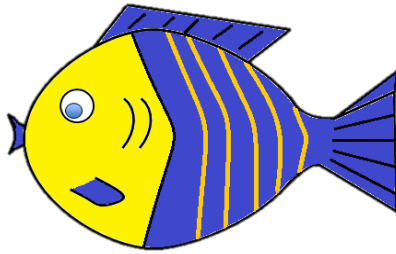
Choose names for each fish below.

- Fish 1: It lives in a red and yellow coral. The coral's branches grow close together and straight up and down.



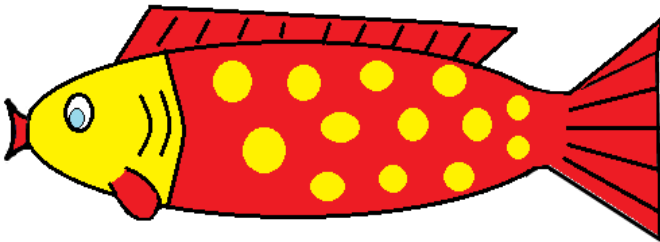
Fish 1 Name:

- Fish 2: It lives in a blue and yellow coral. The coral's branches grow close together and straight up and down.



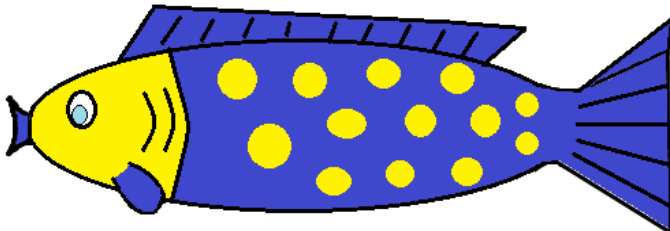
Fish 2 Name:

- Fish 3: It lives in a red and yellow coral. This coral looks like a fan with small holes in it.



Fish 3 Name:

- Fish 4: It lives in a blue and yellow coral. This coral looks like a fan with small holes in it.



Fish 4 Name:

Animals look like their parents. All physical traits, or what an animal looks like, comes from one of their parents. They are a mix of both mom and dad.

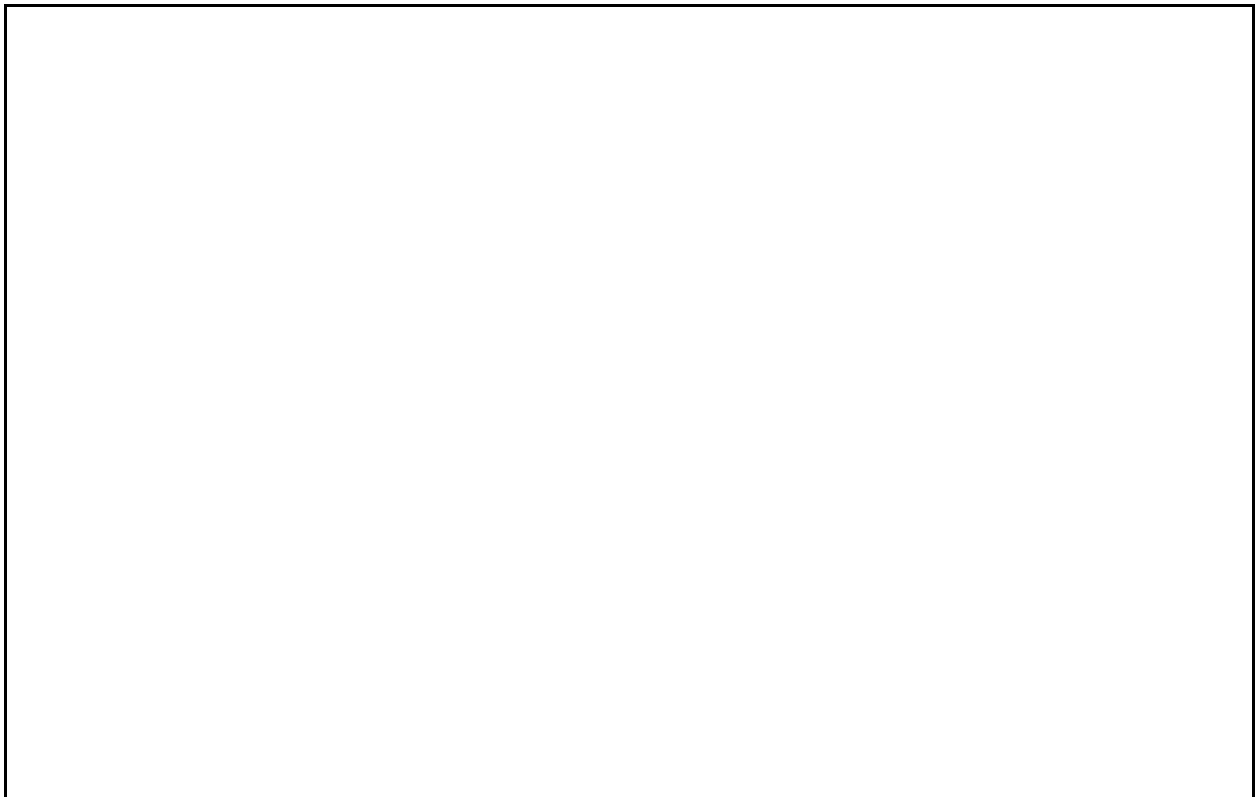
Animals cannot have a trait if one of their parents do not carry the trait. Imagine if some of these new fish had babies. Would you be able to guess what their babies would look like?

Let's test it out! Imagine that you are going to choose two of your fish to be parents.

Choose one fish from above to be the Mom fish. Write the name of the fish you chose.

Next, choose a different fish to be the Dad fish. Make sure it looks different than the Mom fish. Write the name of the fish you chose.

In the space below, draw a picture of what you think the baby fish will look like. Think about the body shape, color, and pattern. Remember that you can only give it traits that one of the parents already has:



Now let's do a test to see what the baby fish might look like.

Body Shape

Circle the body shape of the Mom fish. Round Long

Circle the body shape of the Dad fish. Round Long

Flip a coin. If the coin lands on head, choose the Mom's body shape for the baby. If the coin lands on tails, choose the Dad's body shape for the baby.

Circle the baby's body shape based on your coin toss: Round Long

Color

Circle the color of the Mom fish. Red Blue

Circle the color of the Dad fish? Red Blue

Flip a coin. If the coin lands on head, choose the Mom's color for the baby. If the coin lands on tails, choose the Dad's color for the baby.

Circle the baby's color based on your coin toss: Red Blue

Pattern

Circle the pattern of the Mom fish? Stripes Spots

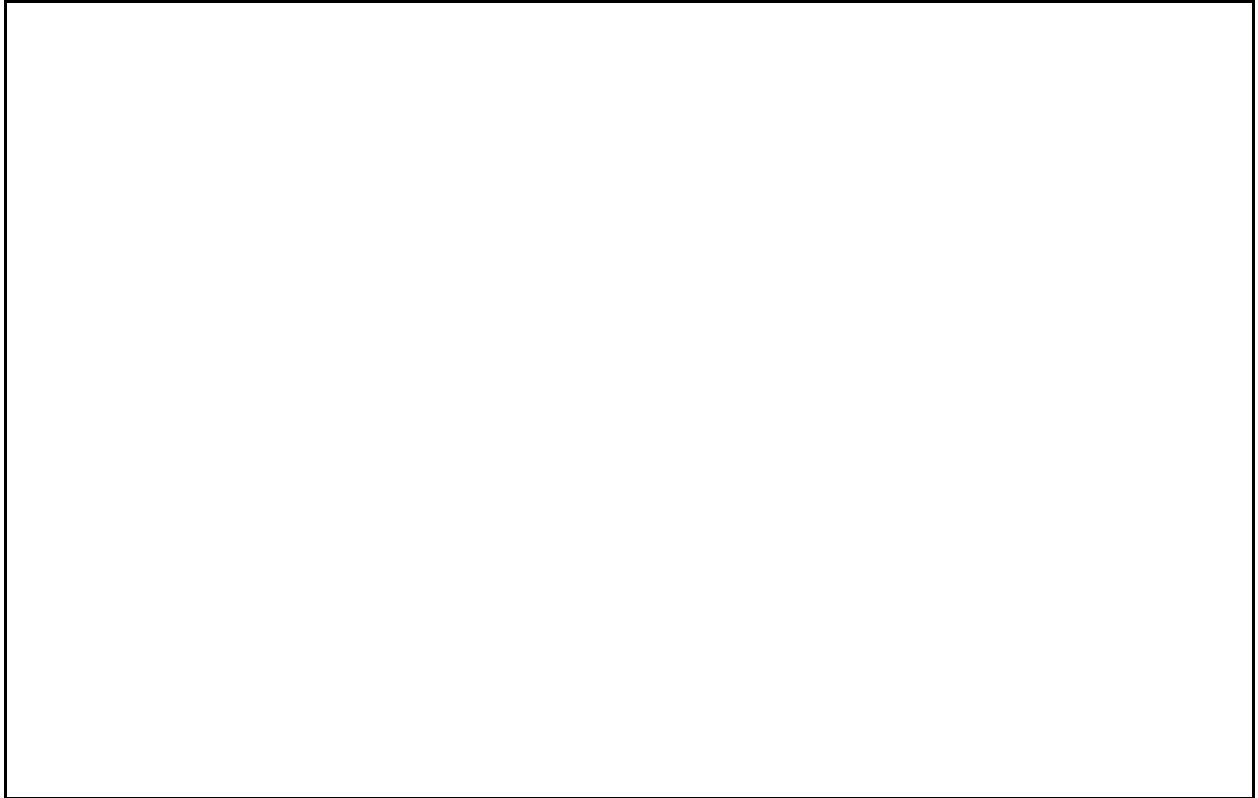
Circle the pattern of the Dad fish? Stripes Spots

Flip a coin. If the coin lands on head, choose the Mom's pattern for the baby. If the coin lands on tails, choose the Dad's pattern for the baby.

Circle the baby's pattern based on your coin toss: Stripes Spots

Baby Fish

Based on your coin tosses, draw a picture of what the baby fish actually looked like in the space below.



Compare the picture of the actual baby fish with the picture of what you guessed the baby fish would look like. What was the same?

What was different?

Try this extra credit question for fun!

Think about how babies look like their parents. Do you think it is possible for the Mom and Dad fish that you chose to have a green baby? Make sure to explain your answer.
