

Part 2: Applying Definitions

There are different names used to describe these different patterns of reproduction. Read the following definitions and then answer the questions.

Viviparous: Fish that are viviparous give birth to live young, similarly to mammals. After fertilization, an embryo develops inside the mother and obtains nutrients from the walls of the mother's reproductive tract. When the embryos are full grown, they are born and look like little fish.

Oviparous: Fish that are oviparous spawn eggs. In some species the females will release eggs into the water at the same time as males release sperm, and fertilization will take place out of the body (external fertilization). In other species, the male and female will mate, the eggs will be fertilized inside the female (internal fertilization), and the fertilized eggs will then be released from her body.

Ovoviviparous: Fish that are ovoviviparous demonstrate a combination of the other two types of reproduction. The eggs are internally fertilized and kept inside the female until they are mature enough to hatch. The developing embryo grows inside an egg case and is nourished by a yolk contained within the egg case. The eggs hatch inside the female, and baby fish are born as live young.

1. a. Which type of reproduction do salmon have?

b. How do you know?

c. Are salmon cartilaginous fish or bony fish?

2. a. Which type of reproduction do rockfish have?

b. How do you know?

c. Are rockfish cartilaginous fish or bony fish?

3. Find the aquarium tank with egg cases on display.

a. What species of fish do these eggs belong to? If there are two different kinds, be sure to list them both.

b. What type of reproduction do they have?

c. How do you know?

d. Are these fish cartilaginous fish or bony fish?

4. Do a little research (by asking the docents, reading the signs, or researching on the internet at home or school) to find out what type of reproduction the following fish have. Write your findings below.

Bony Fish:

- Blackeye goby: _____
- Monkey faced eel: _____
- Cabezon: _____

Cartilaginous Fish:

- Leopard shark: _____
- Round ray: _____
- Skate: _____

5. Does there seem to be a correlation between reproduction type and being either a bony fish or cartilaginous fish? Explain.