

# ZEBRAFISH: JUST LIKE ME?

Zebrafish are found in the wild, but you can also purchase them in pet stores. In the wild they are native to freshwater streams in India, and in some neighboring countries. When we say they live in fresh water, it means that they don't live in the ocean where the water is too salty for them to survive. The habitat where they live is tropical. A tropical place is hot and humid all year round, and has a rainy season where it rains A LOT! By contrast, we live in a temperate environment.



*(Above) Tanks full of zebrafish at the Carnegie Institution.*

You can also find zebrafish in science laboratories. Scientists use this special fish to learn how human bodies work. It may sound strange since we look so different from fish, but we have a lot in common with zebrafish. For instance, humans and zebrafish can get many of the same diseases, like cancer or diabetes. Let's say a scientist wants to figure out how cancer works so they can find a cure for it. It is much easier to first do a science experiment with a simpler animal, like a fish, than a human! A scientist might do research to study how a cancer tumor grows, or give the fish a drug to see if it will kill the tumor (but not the fish!).

Zebrafish and humans have similar physiology. That means we have organs and organ systems within our bodies that are similar. For example, zebrafish have bones and are vertebrates, meaning they have a backbone, just like humans do. We both have a heart, a brain, eyes, cells, DNA, a mouth, kidneys, skin, and blood. We also both have a circulatory system, a digestive system, a respiratory system, and more! And the way that zebrafish grow and develop in the first few days of their life is the same way that we grow and develop in the first few weeks of our lives (before we are born). We do have a few differences, which you will learn about this week during Project BioEYES.

Name: \_\_\_\_\_

## **ZEBRAFISH: JUST LIKE ME?**

Directions: Use the information from the story to answer the questions below. Write your answers with complete sentences. For question 1–3, underline the sentence(s) where you found the information.

1. Where do wild zebrafish live?

---

---

2. What is a tropical habitat like?

---

---

3. How are we similar to zebrafish? Write at least three examples.

---

---

---

---

4. How do you think humans might be different from zebrafish?

---

---

---