

A decorative border of colorful fish, specifically striped surgeonfish, surrounds the text. The fish are arranged in a rectangular frame, with one row at the top, one at the bottom, and vertical columns on the left and right sides. Each fish is oriented towards the right.

# PLANKTON WARS

Understanding Phytoplankton  
and Zooplankton through  
Creativity and Imagination

Created by: Teacher Kate

## Plankton Wars

### Background Information:

Most living things found in the ocean are found in the \_\_\_\_\_ zone. Plankton are organisms that \_\_\_\_\_ at the surface of the water. They move with the ocean \_\_\_\_\_ and \_\_\_\_\_. These organisms can be very, very \_\_\_\_\_ or they can be \_\_\_\_\_.

**Phytoplankton** are one type of \_\_\_\_\_. *Phyto-* comes from a Greek word meaning \_\_\_\_\_. Phytoplankton are drifting or wandering plants. These organisms are single-celled and normally microscopic. Like land plants, phytoplankton use \_\_\_\_\_ to make their own food.

**Zooplankton** are the \_\_\_\_\_ plankton. They cannot create their own \_\_\_\_\_. They feed on phytoplankton and each other. Many of these type of plankton have long appendages (limbs) with attached hairs to help them grab prey and stay afloat. They can also store fats and oils in their bodies to help them float.

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**What is one similarity and one difference between Phytoplankton and Zooplankton?**

**Using what you have just learned about plankton you will now participate in the....PLANKTON WARS!**

**Materials:**

- Zip-lock bags                      Yarn
- Pipe cleaners                      Aluminum Foil
- Toothpicks                      Large plastic container to hold water
- Straws                              Ruler
- Timer                              Other materials as needed

**Your Task:**

1. You will be creating your own plankton and will battle for survival in the sunlight zone.
2. Your goal is to create a plankton that can stay afloat at the surface but can eventually submerge and sink into the water. *(Note: If your plankton cannot sink, the sun will dry the organism causing it to die)*
3. You can only use the materials given to you in the plastic bag.
4. Once you have created your plankton fill in the table below.

<b>Is your plankton Zooplankton or Phytoplankton?</b>	<b>Name of Plankton</b>	<b>Length of Plankton</b>	<b>Width of Plankton</b>	<b>Height of Plankton</b>

## **Before Plankton Wars**

1. How long do you think your plankton will stay afloat in the sunlight zone?
2. What did you add to your plankton to help it stay afloat?

## **After Plankton Wars**

3. How long did your plankton stay in the sunlight zone?
4. What do all plankton need to help them stay alive?
5. What would you change about your plankton if you could redo the challenge?

## Plankton Wars ANSWER KEY

### Background Information:

Most living things found in the ocean are found in the **SUNLIGHT** zone. Plankton are organisms that **FLOAT** at the surface of the water. They move with the ocean **CURRENTS** and **TIDES**. These organisms can be very, very **SMALL** or they can be **LARGE**.

**Phytoplankton** are one type of **PLANKTON**. *Phyto-* comes from a Greek word meaning **PLANT**. Phytoplankton are drifting or wandering plants. These organisms are single-celled and normally microscopic. Like land plants, phytoplankton use **PHOTOSYNTHESIS** to make their own food.

**Zooplankton** are the **ANIMAL** plankton. They cannot create their own **FOOD**. They feed on phytoplankton and each other. Many of these type of plankton have long appendages (limbs) with attached hairs to help them grab prey and stay afloat. They can also store fats and oils in their bodies to help them float.

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**What is one similarity and one difference between Phytoplankton and Zooplankton?**