

Name_____

Date_____Period_____

The Great Plankton Race!

Step 1: Watch the video about plankton for 10 minutes. SILENTLY, answer the following questions as you watch and draw quick, simple pictures of 2 plankton that you observe in the video

1. The word “plankton” comes from a Greek word meaning:_____
2. What are the 2 things that phytoplankton need to grow (hint, they’re plants!)
 - a. _____
 - b. _____
3. Why can phytoplankton only grow near the surface of the water?

Plankton 1	Plankton 2
Picture:	Picture:

Step 2: You will be given a bag with pictures of different plankton. With your group decide on 3 categories you could split the plankton into. Describe your classifications for each category in the space below. Once you are finished, sort the pictures into the 3 categories.

Category 1:	Category 2:	Category 3:
Plankton features:	Plankton features:	Plankton features:

Step 3: Answer the following questions about your plankton pictures:

1. What were some adaptations the plankton have?
2. Most plankton cannot swim, however, they need to float in the photic zone (area of the ocean where sunlight enters) without sinking. What are some possible ways the plankton could slow down how fast they sink?

Step 4: Plankton Race! Your group is going to design and build a plankton model from materials with different densities. You will receive a baggy with different objects in it that you may use to build your model. You do not have to use all of them, and you are welcome to cut them up into pieces that suit your needs. The goal of the plankton race is to design a plankton that will sink as slowly as possible. The plankton that sinks to the bottom of the classroom “ocean” *slowest* will win 1st prize. 1st place gets 3 extra credit points, 2nd place gets 2 extra credit points, and 3rd place gets 1 extra credit point.

Step 5: AFTER THE RACE, answer the following conclusion questions using COMPLETE SENTENCES.

1. Why is it important that plankton not sink too quickly?
2. What is one *real* adaptation you’ve seen on plankton that helps slow down its sinking?
3. What adaptations did *your* plankton have to help slow down its sinking?
4. Draw a picture of your “plankton” below and label each of its adaptations AND a few words about why each adaptation was supposed to be helpful.
5. Why do you think your plankton won or didn’t win?
6. What are some changes you could make to your plankton to help it sink slower?
7. Some plankton avoid sinking by forming chains. Why do you think this could help plankton from sinking?
8. What other materials could have been useful to use as adaptations for your plankton? Why would they be useful to your plankton?