

PURPOSES:

- To work in a cooperative group to plan and build your own plankton net.
- To test the plankton net’s ability to obtain samples of plankton.
- To view the collected plankton samples under the microscope.
- To investigate the biodiversity of plankton.
- To compare and contrast both fresh and salt-water plankton. (Long-range goal)

PROCEDURE:

a.) Form a cooperative group of about 4 students.

LAB PARTNERS:

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- b.) Brainstorm what common household objects you could use for the following parts of your plankton net: towing bridle; hoop or collar; filtering material; collector
 - c.) Record your brainstormed ideas in your data section.
 - d.) Think about shape, size, structure, durability, flexibility, and “getability” (this means do you have it or can you easily get it).
 - e.) Decide on who can and will commit to bringing in what materials and supplies.
 - f.) Determine what miscellaneous supplies you will need to build your plankton net in class.

ASSESSMENT:

Your project is worth a 100-point test grade. Your project grade is based on the following:

- ⇒ *how well you work in your cooperative group;*
- ⇒ *follow-through on bringing in materials;*
- ⇒ *teamwork and focus and help in the plankton net construction;*
- ⇒ *overall contribution to the group effort;*
- ⇒ *successful completion of the project;*
- ⇒ *completed plankton net lab packet.*

PLANKTON NET BRAINSTORMING:

TOWING BRIDLE MATERIALS:

1.) What does the towing bridle need to be able to do?

2.) What are characteristics of the towing bridle?

3.) List at least 3 different possible materials that you could use for the towing bridle.

- a.) _____
- b.) _____
- c.) _____

4.) Which material do you think will work the best? Which material did your group decide on?

HOOP OR COLLAR MATERIALS:

1.) What shape does this part of the plankton net have?

2.) What things do you have at home that have this shape?

3.) What does the hoop / collar part of the plankton net need to be able to do?

4.) Does it need to be rigid or firm or flexible or a combination of these?

5.) List at least 3 different materials that you could use for the hoop or collar.

a.) _____

b.) _____

c.) _____

6.) Which material do you think will work the best as the hoop or collar?

FILTERING MATERIAL:

1.) What does this part of the plankton net need to do?

2.) What are some important characteristics of the filtering material?

3.) List at least 3 different materials that you could use for the filtering material that would seem to have the needed characteristics that you indicated above.

a.) _____

b.) _____

c.) _____

4.) Which materials do you think will work the best as the filtering material of your plankton net?

COLLECTOR MATERIAL:

1.) What does the collector part of the plankton net need to do?

2.) What are some important characteristics of the collector?

3.) List at least 3 different materials that could be used for the collector.

a.) _____

b.) _____

c.) _____

4.) Which material do you think will work best as the collector?

WHO WILL BRING IN WHAT?

LAB PARTNER	PART OF THE PLANKTON NET	MATERIAL TO BE BROUGHT IN
	TOWING BRIDLE	
	HOOP or COLLAR	
	FILTERING MATERIAL	
	COLLECTOR	

MISCELLANEOUS SUPPLIES THAT YOU WILL NEED:

SKETCH OF YOUR PLANKTON NET

