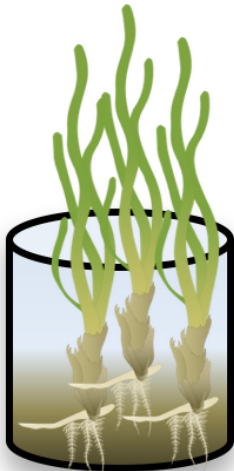**Summer Science**
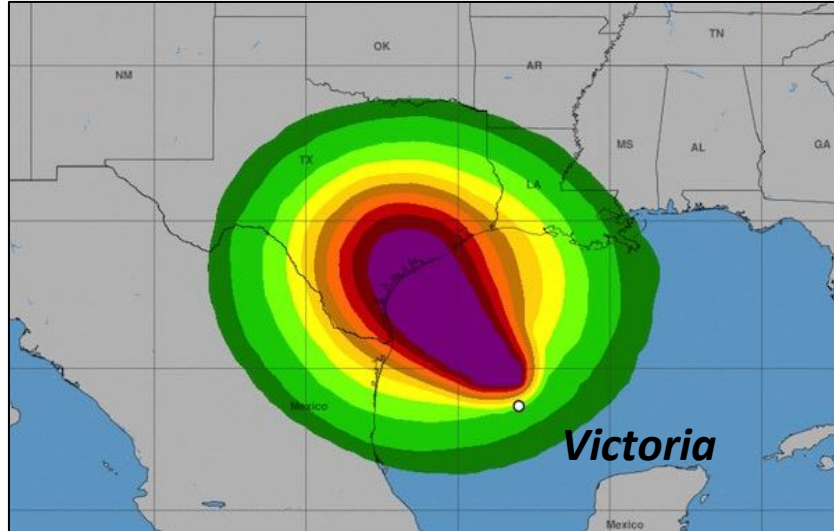Seagrasses, sediments, storms and shorelines

1. Use your awesome artistic skills to draw your seagrass species. Next, label the following plant parts on your illustration: **rhizomes, roots, leaves, shoot**

2. Time to get dirty! Seagrasses come in all shapes and sizes. Record the common name of the seagrass in your seagrass core and construct a table that includes the leaf length and width from ONLY the longest leaf in each shoot. Do this for 5 random shoots. What is the mean length and width of your seagrass species? How does your seagrass compare to other seagrasses in the class? What do you notice about the sediments?
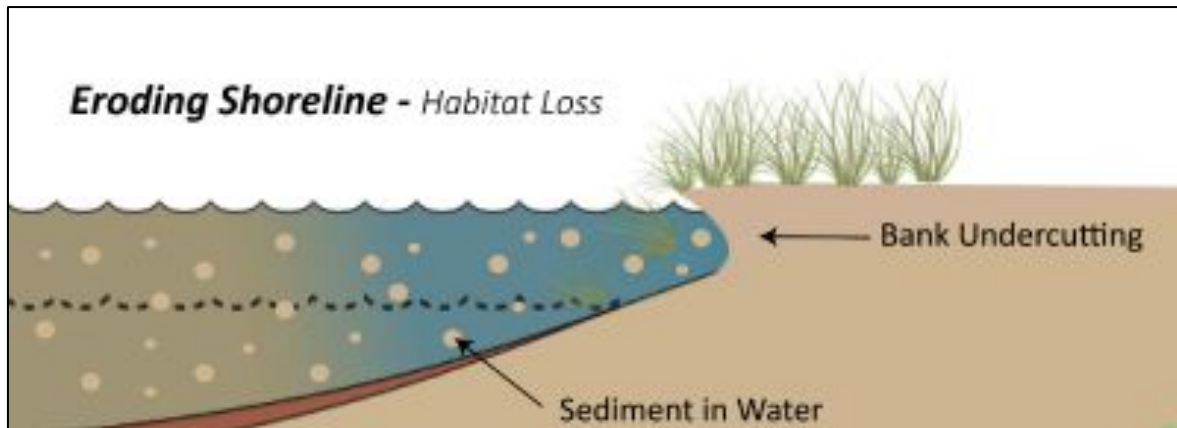
Name of seagrass:

Seagrass core

Victoria

3. It's hurricane season and Hurricane Victoria is heading your way! It is your job to protect the critters (and people!) living along the shoreline. You must create a barrier to prevent or reduce the movement of sand (or sediment). Construct a barrier using the materials supplied to your group in order to accomplish this important job. Predict the order of the barrier type (materials) based on the amount of sand that will pass through and rank them from LOW to HIGH.

Ranking Low to High	Barrier type	Weight
1		
2		
3		
4		
5		
6		

Now, record the weight of sand that made it through the barrier in the far-right column. Which type of barrier has the most sand? The least sand? What are some reasons for these findings?

Eroding Shoreline - *Habitat Loss*

Bank Undercutting

Sediment in Water

4. You LOVE marine science and after graduating from school (CONGRATS!), you land a wonderful job as a coastal ecologist. Unfortunately, Hurricane Victoria stripped large amounts of sediment from the bay shorelines. Your first assignment on the new job is to lead a group of scientists and resource managers in designing a living shoreline (made of natural materials) to restore the conditions of the bay (i.e., water quality, fisheries, shoreline, etc.). Based on the goal of this project, diagram a living shoreline that will result in a healthy bay.