Properties of Water Lab
Student Data Sheets

Stations have been set up around the room. At each station, your group will perform the experiment indicated. The experiments can be done in any order. When you arrive at each station:

1. Read and follow procedures.
2. Record answers in the table provided.
3. If required, predict before observing.
4. Record your observations.
5. Write a possible explanation for your observations.

Station #1 - Freeze		
Prediction	**Observation**	**Explanation**
Frozen		
Room temperature		
What do you still want to know?		

Station #2 Part 1 - Dish and Clips		
Prediction	Observation	Explanation
What do you still want to know?		

Station #2 Part 2 - Clean Dish and Clips		
Prediction	Observation	Explanation
What do you still want to know?		

Station #3 - Stir it Up	
Observation: glass rod	Explanation
Observation: coffee stirrer	Explanation
What do you still want to know?	

Station #4 Part 1 - Stop on a Dime		
Prediction	Observation	Explanation
What do you still want to know?		

Station #4 Part 2 - A Clean Dime		
Prediction	Observation	Explanation
What do you still want to know?		

Station #5 - Wax on, Wax off		
Observation-water	Explanation-water	
Prediction-alcohol	Observation-Alcohol	Explanation-alcohol
What do you still want to know?		

Station #6 - Ballooney		
Prediction #1	Observation	Explanation
Prediction #2 Rubbed balloon	Observation	Explanation
What do you still want to know?		

Station #7 - Anti-Gravity	
Observation Distance water traveled in cm _____	Explanation
What do you still want to know?	

Station #8 - Look Very Carefully!		
Sketch and label what you see		Explain
Water in glass	Alcohol in glass	
Water in plastic	Alcohol in plastic	
What else would you like to know?		

Station #9 - Pepper Anyone?		
Sketch the pepper and water	Sketch again after touching with toothpick or describe what happened	Explanation
Sketch the pepper and water	Sketch again after touching with detergent toothpick or describe what happened.	Explanation
What else would you like to know?		

Station #10 - What's the Difference?			
Substance	Predicted pH	Observed pH	Explanation
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
What else would you like to know?			

Station #11 – Sliding Through ACC		
Prediction	Observation	Explanation
Slide to slide		
Slides with toothpick		

Station #12-Models
Manipulate the models and answer the following questions.

1. Pull the pieces apart until there are 4 models, each containing one red and two white parts. What does each of these four models represent?

2. What does the red part represent? The white part?

3. Put the 4 water molecules close together again until they connect. Sketch and explain what happens.

4. What happens when you put two white parts together? Two red parts?

5. What type of force is attracting the models to each other? What type of force attracts actual water molecules to each other?

6. What holds the oxygen to the hydrogen in an actual water molecule?