

## **REFRACTION ACTIVITIES**

Name: \_\_\_\_\_

Hour: \_\_\_\_\_

*Visit each station in any order. At each station complete the observations and any additional instructions.*

### **Colored Paper Behind Glasses**

Stand in front of the glasses such that the water level is at eye level. For the best effect, close one eye. Move your head from left to right. Below, record your observations and focus on what colors are visible in what locations. Make a sketch of where different colors are displayed.

### **Pencil in Air, Oil, and Water**

Below, record your observations and comment on how the shape of the pencil changes. Make a sketch of the pencil in the air, oil, and water.

### **Masses Hiding in the Fish Tank**

While looking through the surface of the water to the bottom-back of the tank, lower your head until your eyes are level with the water. Below, record your observations of what you do and don't see as you lower your head. As you lower your head what is changing that results in the masses becoming visible?

### **Sunken Car**

Below, record your observations and comment on how the appearance of the car changes when viewed from the right side and the left side of the beaker.

### **Floating Horse**

Change your perspective until you can view the floating horse. Below, record your observations. This is an example of reflection rather than refraction. Draw a ray diagram of how this image could be formed. Is the image real or virtual?

### **Lasers through the Fish Tank**

Record your observations as your teacher shines lasers through the water in the fish tank. Sketch the paths of the lasers.