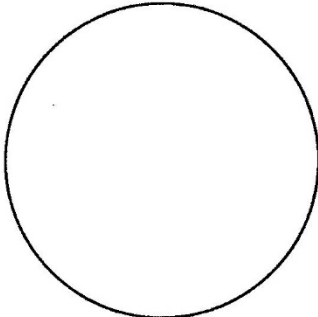


Water Transparency Group Instructions

1. Locate a good place to sample the water. Don't avoid scummy sections. Use the red bucket on the rope to collect samples from the creek – **do not scoop up the mud from the streambed**. Use the well bailer to collect samples from the wells.
2. Close the white clamp at the bottom of the Transparency Tube. Notice the black and white pattern at the bottom of the tube.
3. Fill the tube to the 120 cm mark and shade the tube with your body or a tree.
4. Look down through the top of the tube and use the Crayola color chart to determine the closest matching color to the water sample. Use the crayons provided to fill in the square next to the Crayola Color Name line on the data recording sheet. **Please try not to break the crayons!**
5. Now look down through the top of the tube to see if you can see the black & white pattern you noticed earlier at the bottom.
6. If you can see the pattern, then record >120 cm for the transparency on the data recording sheet.
7. If you can't see the pattern, have a partner slowly release the water using the white clamp. Have them stop when you can just begin to see the black & white pattern. Record the height of the water in the tube using the scale on the side of the tube on the data recording sheet.
8. Use a pipette to collect a small water sample from the tube and put a few drops in the plastic dish and place the dish on the stage of the field microscope.
9. Take turns looking through the microscope. Write a description of what you see and then use the colored pencils to draw a sketch of what it looks like on the data recording sheet.
10. Write down any factors at your site that may influence the amount and type of suspended material in the water on the data recording sheet.
11. Empty the transparency tube, bucket and bailer onto the ground (never back into the creek or the well).
12. Write a description of the sampling site on the data recording sheet.
13. Move on to other sites and make as many observations of different types of water as you have time for.

Date: _____ Latitude: _____ °N	
Time: _____ Longitude: _____ °W	
Site Description or Well Number:	
Transparency: _____ cm	
Crayola Color: _____ <div style="display: inline-block; width: 30px; height: 30px; border: 1px solid black; margin-left: 10px;"></div>	
Suspension Description:	<div style="text-align: center;">Sketch</div> <div style="text-align: center;">  </div>