

👤 Your Name: _____



Group Members: _____

Group Members: _____

Group Members: _____

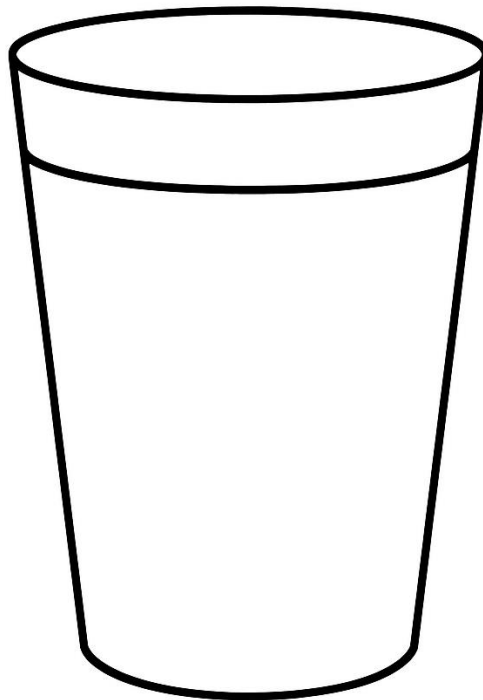
Drinking Water Quality Worksheet

I. Make a Prediction!

What do you think the dirty water will look like?

Think about its color, smell, and what kind of test results you might expect, and write it down.

Draw what your cup of water looks like, below!



II. Round 1 – Test Contaminated Water

Use your test strips to check the contaminated water. Record your results in the table below.

Check out the last page for help!

PRIMARY WATER STANDARDS: Things we check to make sure the water is safe to drink!

Substance	Units	Sample A Detected	Range	Typical Source
Chlorine	(mg/L)		???	Disinfectant added for treatment
Nitrate (as N)	(mg/L)		???	Runoff from fertilizer/sewage, erosion of deposits

SECONDARY WATER STANDARDS: The Look, Smell, and Taste Test!

Substance	Units	Sample A Detected	Range	Typical Source
Water Hardness	(mg/L)		???	Groundwater that has passed through mineral-rich rocks
Color	Visually		???	Naturally occurring organic materials
pH	0-14		???	Aesthetic (taste/feel/corrosiveness)
Total Dissolved Solids	ppm		???	Runoff/leaching from natural deposits

III. Watch the Treatment

What happened when the purifier was added and mixed into the water? What changes did you notice? Did you notice any signs of coagulation or flocculation?

IV. Round 2 – Test Treated Water

Repeat your tests on the treated water. Record your results below. ***Remember~ Check out the last page for help!***

PRIMARY WATER STANDARDS: Things we check to make sure the water is safe to drink!

Substance	Units	Sample B Detected	Range	Typical Source
Chlorine	(mg/L)		0.23 – 0.97	Disinfectant added for treatment
Nitrate (as N)	(mg/L)		1.3 – 5.8	Runoff from fertilizer/sewage, erosion of deposits

SECONDARY WATER STANDARDS: The Look, Smell, and Taste Test!

Substance	Units	Sample B Detected	Range	Typical Source
Water Hardness	(mg/L)		4.0 – 15	Groundwater that has passed through mineral-rich rocks
Color	Visually		5 – 10	Naturally occurring organic materials
pH	0-14		7.8 – 8.2	Aesthetic (taste/feel/corrosiveness)
Total Dissolved Solids	ppm		170 – 400	Runoff/leaching from natural deposits

V. Reflection Questions

1. What differences did you see between your test results and the recommended safe range?

2. What changed between Sample A (contaminated) and Sample B (treated)? What does that tell you about the treatment process?

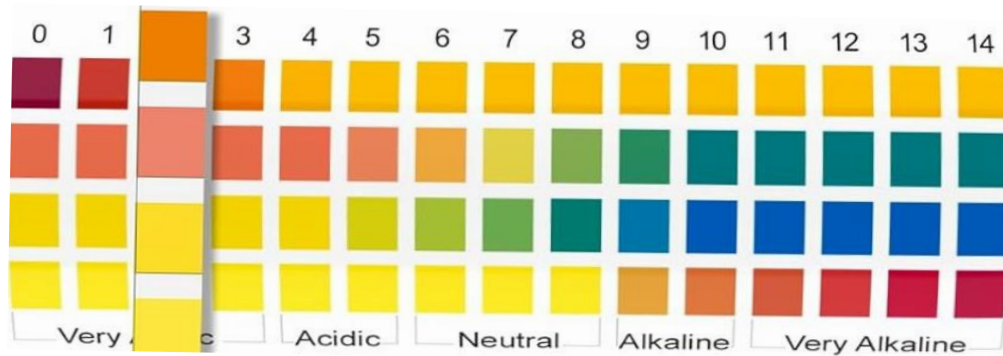
3. Why do you think it's important to test drinking water in real life?

VI. Peer Comparison

Compare your group's results with another group. What was different or similar?

👁️ Match Colors Carefully

Compare your **pH** strip here!



Compare your **chlorine** strip here!



Compare your **hardness** strip here!



Compare your **nitrate/nitrite** strip here!

