**Many directions for WATER UNIT: Investigations**

1. What’s in your water?
2. Does your team’s Model Water Treatment Plant improve your source water quality?
3. In what water samples do you detect impurities? Are impurities detected in local water

samples?

1. Are there dissolved solids in your water samples? Which local waters have the most dissolved solids?
2. Do local water samples show signs of turbidity? If so, to what NTU level?
3. What signs of distress do bioindicators reflect when living in different water samples?
4. Water quality bioindicators are most affected by which local water samples?
5. How do additional dissolved solids in water affect bioindicators?
6. Analyze local waters for dissolved and undissolved impurities.
7. Design and use a simple water filtering device to remove impurities from local source water.
8. How well did aluminum sulfate (alum) remove suspended solids from local source water? (compare NTU values before, then after, the addition of alum).
9. How well did your group’s treatment processes improve the local source water? How much cleaner is your group’s “cleaned/treated” water than the source water it came from?