Turbidity

- Measures how much light is scattered by the water sample
- Suspended solids
- Samples containing more particulates will have higher readings (more turbid)
- Which sample do you believe will have a higher reading?

TDS (<u>Total Dissolved Solids</u>)

- Measures amount of dissolved solids
- Different from turbidity because solids are dissolved (example: salt)
- Produced by water running over rocks/soil
- Not harmful, just affects taste
- Measured in mg/l (<300mg/l, excellent taste)
- Next three tests measure dissolved solids

Ammonia

- Measures amount of ammonia in water
- Used in fertilizers
- Good for plants

Hardness

- Measures amount of Calcium (Ca) and Magnesium (Mg) in water
- Called "hard" because it is hard to make soap suds
- Reported as mg/l, 4 − 400 is range
- Not harmful, but in higher concentrations can be irritating to skin
- Plants need Ca and Mg for photosynthesis

Nitrate/Nitrite

- Found in all cells, especially muscles, a building block of proteins
- Comes from decay of plants, animals, nitrogen-fixing bacteria
- High levels cause Methemoglobinemia (blue baby syndrome)
- Plants need nitrate and nitrite