CORROSION QUIZ

1.) Most lead action level exceedances originate from naturally occurring lead in the ground water   True/**False**

2.) If the pH of Bleach is 13 and the pH of an Ammonia solution is 11, bleach is **20** times more alkaline than Ammonia?

3.) At what pH range is waters' buffering capacity the lowest? **8.0-8.5**

4.) Why do regulators care most about corrosion? **Lead AL Exceedances Health Effects**

5.) Water with an Alkalinity of 200 mg/L CaCO3 and a pH of 9 is likely to be: **scale forming**, or stable, or corrosive

6.) Water with an Alkalinity of 50 mg/L CaCO3 and a pH of 6.5 is likely to be: scale forming, or stable, or **corrosive**

7.) Polyphosphates are excellent corrosion inhibitors True/**False**

8.) Hardness is primarily composed of **Calcium and Magnesium**, or Chloride and Sulfate, or Iron and Manganese

9.) TDS is closely related to: Alkalinity, or pH, or **conductivity**

10.) Copper corrosion is easy to spot on exposed pipe due to its characteristic **blue-green** color?

11) Alkalinity and Hardness are both expressed as mg/L of CaCO3? **TRUE**

12.) Galvanized Iron pipe is coated with **Zinc** to prevent corrosion?

13.) The optimal pH range for Orthophosphates to work best is **7.2-7.8**

14.) Name one way to increase your pH without adding chemicals. **Aeration**

15.) Polyphosphates should be added **before** or after chlorination?

16.) Why is Calcium precipitation rarely used as a means of corrosion control? **CaCO3 scales rarely form on Galvanized Iron, Copper or Lead pipe**
Other answers: Over/under precipitation (uneven), hydraulic stress (over-precipitation), light scales can be easily dislodged

17.) Gas chlorine raises/**lowers** the pH? Sodium Hypochlorite **raises**/lowers the pH?

18.) What does pH stand for? **Potential Hydrogen ion Activity**

19.) Water with a Hardness of 16 mg/L CaCO3 would be considered soft. **True**

20.) Immediately prior to collecting Lead & Copper samples for compliance it is important to clean the faucet aerator screens. **Absolutely Not**