

## Molecules

1. Why do molecules interact?
2. What governs molecular interactions?

## Properties of Amino Acids

1. Where in a protein would you put
  - a. Gly
  - b. Acidic residues
  - c. Basic residues
  - d. Hydrophobic
  - e. Polar, non-charged
2. How can you tell what type of an amino acid you are looking at?
3. What types of bonds/forces are possible between amino acids?
4. What parts of amino acids can form hydrogen bonds? What structures are stabilized by those bonds?
5. How do you know whether a bond is polar or non-polar?

## Time Line

1. In L1 we stated two big ideas
  - a. On the fundamental level many cells share many processes/mechanisms
  - b. Organisms and the environment modify each otherWhere did we come back to these ideas so far?

## Thermodynamics

1. What is the meaning of  $\Delta G$ ?
2. What do enzymes do?

## Metabolism

1. Explain why it can be said that photosynthesis is the reverse of respiration.
2. Explain why it can be said that we owe our existence to a little green bacteria.

## How do you approach a problem?

1. What is being asked?
2. What concepts is it getting at?
3. Are the details important?