Traffic Light: Use the colors red, yellow and green to identify how you feel about the following topics. Highlight topics in GREEN if you feel comfortable with it, YELLOW if you have some doubts about it and RED if you have no idea and need to seek help. Use the libguide to help you study: https://bit.ly/2vu7rpt

**Biological Molecules (Kognity 4.1)**
- Organic
- Element composition
- Monomers
- Polymers
- Polar and Nonpolar
- Hydrophobic and Hydrophilic
- Saturated Hydrocarbons (alkane)
- Unsaturated Hydrocarbons (alkenes and alkynes)
- Macromolecules
- Phospholipid bilayer
- Dehydration synthesis
- Hydrolysis

**Carbohydrates (Kognity 4.1)**
- Structure and function
- Monosaccharides: glucose and fructose
- Disaccharides: sucrose
- Polysaccharides
- Monosaccharides formula
- Glycolysis and glycogen
- Iodine and Benedict test

**Proteins (Kognity 4.1)**
- Element composition
- Catalyst: enzymes
- Biuret test
- Composed of Amino Acid chains
  - Peptide bonds
  - R-groups
  - Amino, carboxyl and R-groups
- Structure and function: primary, secondary, tertiary, quaternary structures

**DNA (Kognity 4.2)**
- Nucleotides: base, sugar and phosphate
- DNA vs RNA
- Purines and Pyrimidines
- Hydrogen bonding
- Nucleotide

**Water (Kognity 4.3)**
- Cohesion and Adhesion
- Surface tension
- Dipole-Dipole
- High Specific Heat
- High Heat of Vaporization
- Universal Solvent
- Density
- Role in digestion, excretion and transport (Table 1)

**Lipids (Kognity 4.1)**
- Element composition
- Solubility
- Triglycerides: structure and hydrophobic
- Amphiphilic
- Trans fats: stay in the bloodstream much longer than saturated or unsaturated fats.
- Ethanol emulsion test: cloudy