

STATION #1:

- | | | | |
|---|---------------------------|------------------|--|
| 1. <u>pH Scale</u>
<u>H⁺ ions</u> | b <u>OH⁻</u> | b <u>NaOH</u> | 10. _____ |
| 2. <u>1-6</u> | 5. a <u>Gastric Juice</u> | c <u>Ammonia</u> | 11. <u>Buffer</u>
to neutralize
the blood back
to normal pH
range for blood. |
| 3. <u>8-14</u> | b <u>Coffee</u> | 7. <u>~ 7.5</u> | |
| 4. a <u>H⁺</u> | c <u>HCl</u> | 8. <u>~ 1.5</u> | |
| | 6. a <u>Bleach</u> | 9. _____ | |

STATION #2

- First fill a beaker with water (the universal solvent) to 100 ml.
• Then add 1/4 tablespoon of salt which is a solute.
• Mix the solution, until all of the salt has dissolved into water (solvent) to make a homogenous mixture.

2. physically

STATION #3:

- organic
- Carbohydrates
Lipids
Proteins
Nucleic Acids

3.

Diagram	Type of Macromolecule	Specific monomer or polymer
A		
B	Carbohydrate	Monosaccharide
C	Lipid	Phospholipid
D	Lipid	triglyceride
E	Lipid	Steroid
F	Protein	Amino Acid
G	Nucleic Acid	Nucleotide
H	Carbohydrate	Disaccharide
I	Carbohydrate	Polysaccharide
J	Lipid	triglyceride

1. Carbon dioxide

a Carbon

a oxygen

b CO₂

b



c Covalent

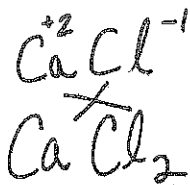
2. Calcium Chloride

a Calcium

a Chlorine

b CaCl₂

b



c Ionic

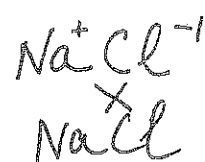
3. Sodium Chloride

a Sodium

a Chlorine

b NaCl

b



c Ionic

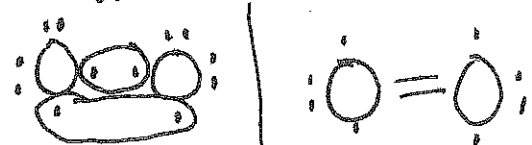
4. Oxygen

a Oxygen

a Oxygen

b O₂

b



c Covalent

5.

Element	Symbol	Atomic #	Mass #	# of Protons	# of Neutrons	# of Electrons	Valence Electrons
Carbon	C	6	12	6	6	6	4
Hydrogen	H	1	1	1	0	1	1

Isotopes	Atomic #	Mass #	# of Protons	# of Neutrons	# of Electrons	Valence Electrons
K-42	19	42	19	23	19	1
F-20	9	20	9	11	9	7

6. Dating fossils

- Medical purposes - such as treating cancer
- Traces materials through substances

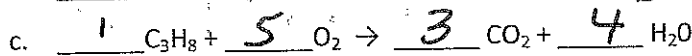
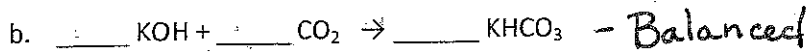
STATION #7:

1. a Activation Energy
 b Reactants
 c Products
2. Energy Released
3. Energy Absorbed
4. Catalysts or proteins
5. Speed up a reaction and lowers activation energy needed

6. Minimum amount of energy needed to start Reaction
 $\approx 65^\circ\text{C}$
7. _____
8. enzymes and substrates are like puzzle pieces or like a lock and key. This means that an enzyme binds to a specific substrate based on its shape. Only fits in a certain lock so together w/ one piece of the puzzle.

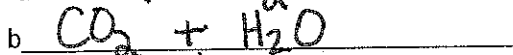
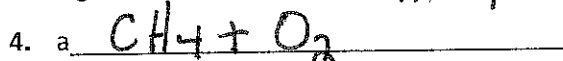
STATION #8

1. Balance the following Equations:



2. K 1, O 3, H 1, & C 1

3. Signs of chemical reaction \rightarrow Heat, fire, light (etc)



c Fire, Heat released

d Exothermic

5. Reactants

6. Products

7. a endothermic

b Exothermic

STATION #9

1. a less dense than H_2O

b ~~more~~ (no) - ~~push~~ ~~is~~ ~~not~~

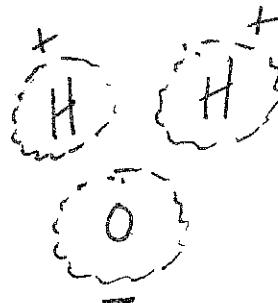
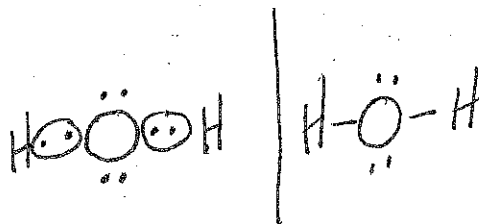
2. a Capillary Action

b Adhesion - bonds to other materials

3. a Surface tension

b Cohesion

4.



5. Hydrogen Bonds

Station # 8



$$\text{C} = \# 2$$

$$\text{H} = \# 8$$

$$\text{S} = \# 2$$

$$\text{O} = \# 14$$

$$\text{C} = \# 2$$

$$\text{H} = \# 8$$

$$\text{S} = \# 2$$

$$\text{O} = \# 14$$



$$\text{C} = 3$$

$$\text{H} = 8$$

$$\text{O} = 2$$

$$\text{C} = \# 3$$

$$\text{H} = \# 8$$

$$\text{O} = \# 10$$

