

SCIENCE

Name: Hugo P. Molina

Section: Cytosine

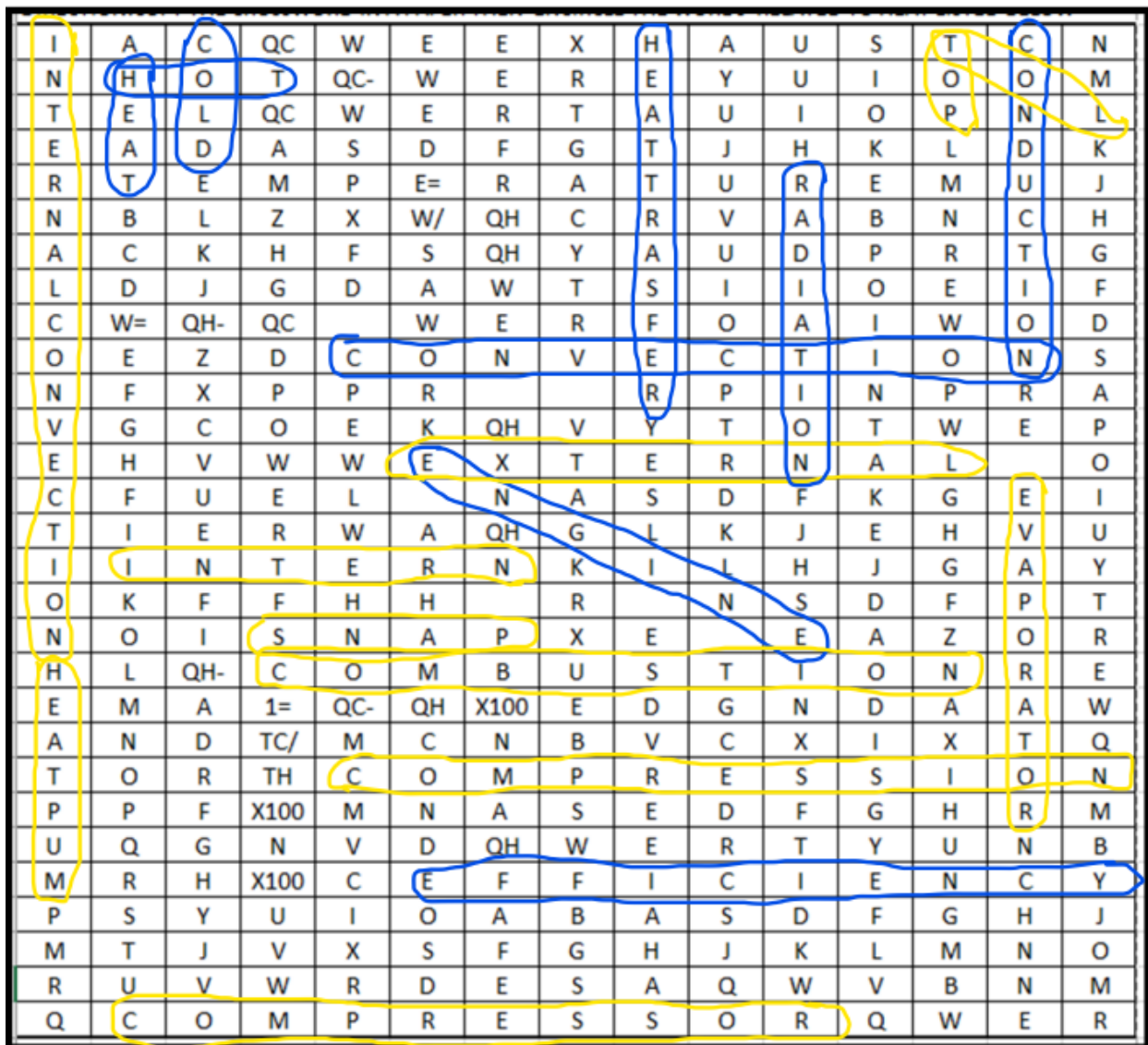
Date: June 27, 2021

ACTIVITY 1: HEAT LIST!

Legend:

Yellow Circle = Words that I found that are not related to the list.

Blue Circle = Words that are in the list (aka the answers).



ACTIVITY 2: HIT ALL YOU CAN!

A.

1. Heat
2. Heat transfer
3. Heat engine
4. Energy added by heat
5. Energy removed by heat

B.

1. $Q_h = 5500 \text{ J}$
 $Q_c = 3000 \text{ J}$

$$W = Q_h - Q_c$$
$$W = 5500 - 3000$$
$$W = \underline{2500 \text{ J}}$$

$$e = W_{\text{out}} / Q_{\text{in}}$$
$$e = 2500 / 5500$$
$$e = \underline{0.45 \text{ or } 45\%}$$

2. $Q_h = 200 \text{ J}$
 $Q_c = 150 \text{ J}$

$$e = 1 - Q_c / Q_h$$
$$e = 1 - 150 / 200$$
$$e = 1 - 0.75$$
$$e = \underline{0.25 \text{ or } 25\%}$$

3. $T_h = 700\text{K}$
 $T_c = 400\text{K}$

$$e = 1 - T_c / T_h$$
$$e = 1 - (400 / 700)$$
$$e = 1 - 0.57$$
$$e = \underline{0.43 \text{ or } 43\%}$$