Name:		HURBAN EASSEMBLY			
<b>Chemistry</b> ~ Ms. Hart	<u>Class:</u>	Anions	or	Cations	SCHOOL FOR CRIMINAL
<b>2.6 – Heat a</b>	nd Temperat	ure – HW			
Directions: Circle your answer an	d write an exp	lanation if the	que	stions asks f	or one.
-	REMEMB	$ER: K = {}^{\mathrm{o}}C + 2$	273		
1. Which temperature represents	absolute zero?				
1. 0 K		3.	273	3 K	
2. 0°C		4.	273	3°C	
2. At which temperature does a w	ater sample ha	we the highest	ave	erage kinetic	energy?
1. 1. 0°C		3.	2.1	loo°C	

4. 4.100. K 2. 3. 0. K

WHY? Show your work and write an explanation.

3. If two systems at different temperatures have contact with each other, heat will flow from the system at Show your work and explain:

- 1. 20°C to a system at 303K
- 2. 30°C to a system at 313K
- 3. 40°C to a system at 293K
- 4. 50°C to a system at 333K

Name:	Date:			HURBAN EASSEMBLY					
<b>Chemistry</b> ~ Ms. Hart	<u>Class:</u>	Anions	or	Cations	SCHOOL FOR CRIMINAL JUSTICE				
<u>2.6 – Heat and Temperature – HW</u>									
Directions: Circle your answer and write an explanation if the questions asks for one.									
REMEMBER: $K = °C + 273$									
1. Which temperature represents abs	solute zero?								
1. O K		3.	273	Κ					
2. 0°C		4.	273	°C					
2. At which temperature does a water sample have the highest average kinetic energy?									
1. 1.0°C	-	3.	2.1	oo°C					
2. 3. 0. K		4.	4.1	00. K					
WHY? Show your work and write an	explanation.								

3. If two systems at different temperatures have contact with each other, heat will flow from the system at

- Show your work and explain: 1. 20°C to a system at 303K
- 2. 30°C to a system at 313K
- 3. 40°C to a system at 293K
- 4. 50°C to a system at 333K

- 4. As ice cools from 273 K to 263 K, the average kinetic energy of its molecules will
  - 1. decrease
  - 2. increase
  - 3. remain the same
- 5. As the temperature of a substance *decreases*, the average kinetic energy of its particles
  - 1. decreases
  - 2. increases
  - 3. remains the same

What is the definition of kinetic energy in your chemistry textbook?

THE MOST IMPORTANT QUESTION... 6. What occurs when a 35-gram aluminum cube at 100.°C is placed in 90. grams of water at 25°C in an insulated cup?

1. Heat is transferred from the aluminum to the water, and the temperature of the water decreases.

2. Heat is transferred from the aluminum to the water, and the temperature of the water increases.3. Heat is transferred from the water to the aluminum, and the temperature of the water

decreases.

4. Heat is transferred from the water to the aluminum, and the temperature of the water increases.

4. As ice cools from 273 K to 263 K, the average kinetic energy of its molecules will

- 1. decrease
- 2. increase
- 3. remain the same

5. As the temperature of a substance *decreases*, the average kinetic energy of its particles

- 1. decreases
- 2. increases
- 3. remains the same

What is the definition of kinetic energy in your chemistry textbook?

THE MOST IMPORTANT QUESTION... 6. What occurs when a 35-gram aluminum cube at 100.°C is placed in 90. grams of water at 25°C in an insulated cup?

1. Heat is transferred from the aluminum to the water, and the temperature of the water decreases.

Heat is transferred from the aluminum to the water, and the temperature of the water increases.
Heat is transferred from the water to the aluminum, and the temperature of the water decreases.

4. Heat is transferred from the water to the aluminum, and the temperature of the water increases.