

# Cosmic Chemistry: Planetary Diversity

# Here Comes the Heat

## STUDENT REPORTING/DATA SHEET

### PART 1

Question #1: Why do you think Herschel placed the thermometer outside the visible spectrum? \_\_\_\_\_

\_\_\_\_\_

Question #2: What would Herschel's null hypothesis have been? \_\_\_\_\_

\_\_\_\_\_

### PART 2

**Table 1**

Nanometers	Microns	Wavenumber
	1.2	
		4,000
		8,000
2,000		
	13	

### PART 3

Question #1: Which would be brighter and more visible in the wintertime—a rock covered with snow or a dog chasing a rabbit? \_\_\_\_\_

Explanation \_\_\_\_\_

Question #2: Would you observe night and day, as you do without the glasses? \_\_\_\_\_

Explanation \_\_\_\_\_

Question #3: Would stars be visible? \_\_\_\_\_

Explanation \_\_\_\_\_



Question #4: From the outside, would a warm house look different from an unheated house? \_\_\_\_\_

Explanation \_\_\_\_\_

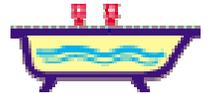
Question #5: What would the inside of a freezer operating at the freezing point of water look like?

\_\_\_\_\_

Question #6: If a man were standing in the sunlight would his white shirt or his black suit appear to be brighter?\_\_\_\_\_

Explanation\_\_\_\_\_

Question #7: Could you judge the temperature of your bath water just by looking at it? \_\_\_\_\_



Explanation\_\_\_\_\_

**PART 4**

Enter the name of the planet beside each letter from the graph:

A: \_\_\_\_\_

B: \_\_\_\_\_

C: \_\_\_\_\_

D: \_\_\_\_\_

E: \_\_\_\_\_

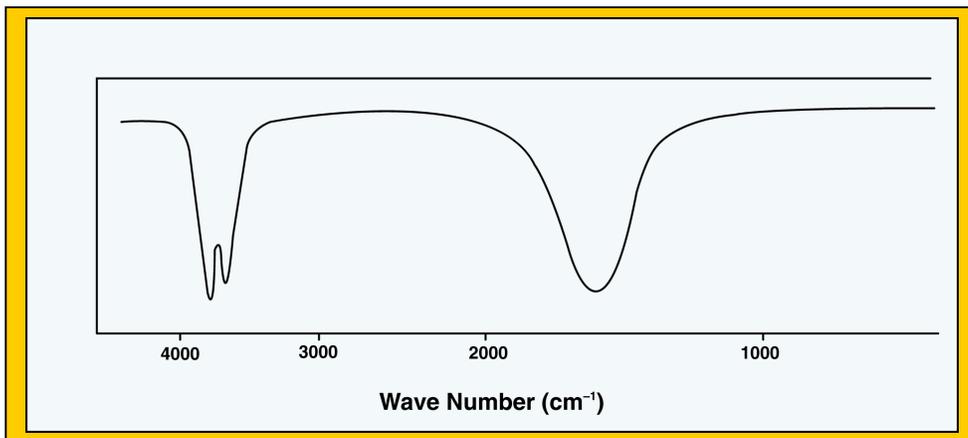
F: \_\_\_\_\_

The value I have determined for the constant is: \_\_\_\_\_.

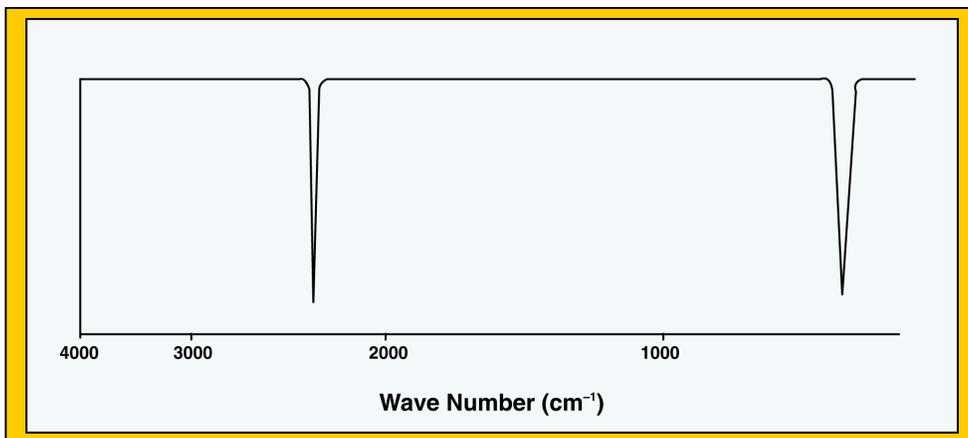
The units are: \_\_\_\_\_

PART 5

Spectrum A



Spectrum B



Spectrum A: Planet \_\_\_\_\_

Spectrum B: Planet \_\_\_\_\_