

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? _____

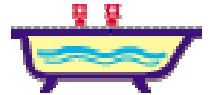
Explanation _____

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: _____

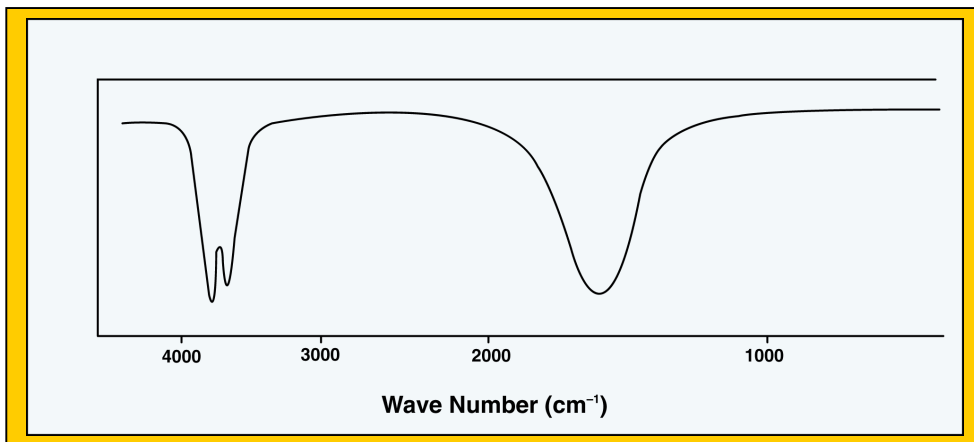
F: _____

The value I have determined for the constant is: _____.

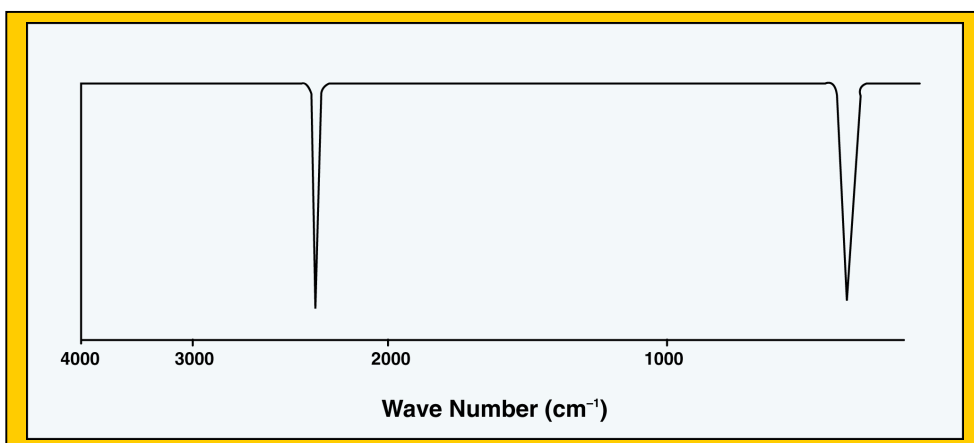
The units are: _____

PART 5

Spectrum A



Spectrum B



Spectrum A: Planet _____

Spectrum B: Planet _____