

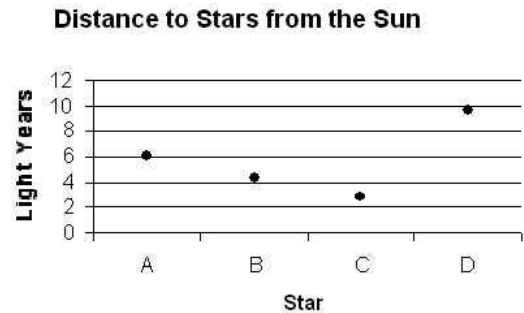
Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## UNDERSTANDING ASTRONOMY GRAPHS, DIAGRAMS, AND CHARTS

Directions – complete each of the following to help you understand the information graphs, charts, and diagrams provide.

### GRAPH

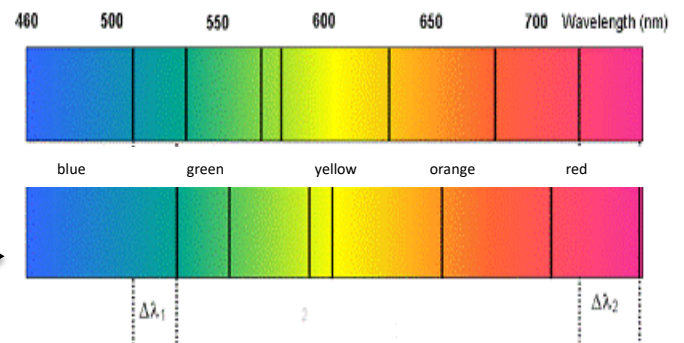
1. What does A, B, C, and D represent on the x axis?
2. What is measured on the y-axis?
3. If a satellite was sent out into space, which star would it reach in 6 years? Explain your answer?
4. If a space probe will launched into space will only work properly for 5 years, what stars would the probe be able to reach and collect data? Explain your answer.



### DIAGRAM

Measurements of light from a nearby star were made. Doppler analysis was performed and the spectral lines in Figure B were observed.

(Figure A – top - spectral control) →



(Figure B – bottom - spectral lines from a nearby star) →

1. What do the numbers above figure A represent?
2. What is the difference between figure A and B?
3. If figure A is the control, what is figure B showing?

## CHART

	Mercury	Venus	Earth	Mars	Jupiter
Distance from Sun (millions of km)	57.9	108.2	149.6	227.9	778.3
Year	88 days	224.7 days	365.2 days	687 days	11.86 yrs
Day	59 days	243 days retrograde	23 hr 56 min 4 sec	24 hr 37 min	9 hr 55 min 30 sec
Diameter (km)	4,880	12,100	12,756	6,794	142,800
Atmosphere (main components)	Virtually none	Carbon dioxide	Nitrogen Oxygen	Carbon dioxide	Hydrogen Helium
Satellites	0	0	1	2	16
Rings	0	0	0	0	3

1. What information is this chart showing?
2. What planet has the largest diameter?
3. Which planet has the shortest year?
4. Which planet has the longest year?
5. Which planets do not have moons?
6. Why might Mercury not have an atmosphere?
7. Which planets have similar atmospheres?