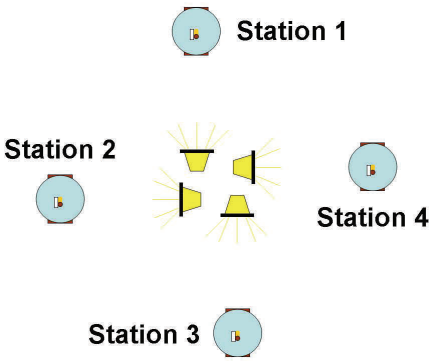
Season Globes Data Sheet

Name _____



Circle <u>your</u> hypothesis:
Seasons are caused by Earth's ***CHANGING DISTANCE*** from the Sun **OR**
Seasons are caused by Earth's ***TILT***.

DISTANCE

Directions: *Record the data as it is gathered in the appropriate box. Answer all questions. Readings are in "V" (Volts).*

1) How far is the globe from the light?

2) How big was the change in distance?

3) What is the % change in distance?

Station 1, **Utah**	
Near:	
Far:	
Difference:	

Station 1

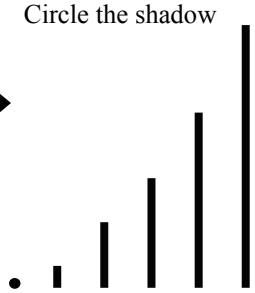
TILT

Max Readings	
Utah:	
Argentina:	

4) Is Utah in daylight for: half a rotation, less than half, more than half?

5) How long is the shadow of the peg near New York (when shortest)? ⟶

Circle the shadow



6) Is the Sun HIGH, MEDIUM or LOW in the sky when the peg's shadow is shortest <u>at this station</u>?

Station 2

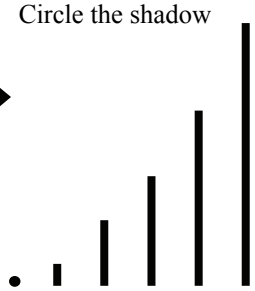
TILT

Max Readings	
Utah:	
Argentina:	

7) Is Utah in daylight for: half a rotation, less than half, more than half?

8) How long is the shadow of the peg near New York (when shortest)? ⟶

Circle the shadow



9) Is the Sun HIGH, MEDIUM or LOW in the sky when the peg's shadow is shortest <u>at this station</u>?

Station 3

TILT

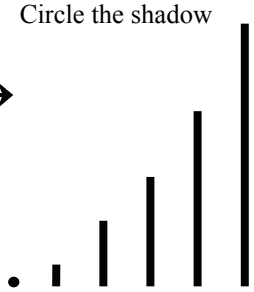
Max Readings

Utah:	
Argentina:	

10) Is Utah in daylight for: half a rotation, less than half, more than half?

Circle the shadow

11) How long is the shadow of the peg near New York (when shortest)? →



12) Is the Sun HIGH, MEDIUM or LOW in the sky when the peg's shadow is shortest <u>at this station</u>?

Station 4

TILT

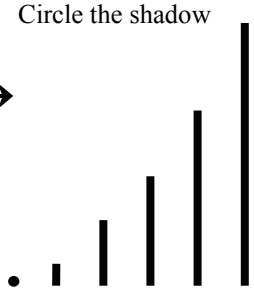
Max Readings

Utah:	
Argentina:	

13) Is Utah in daylight for: half a rotation, less than half, more than half?

Circle the shadow

14) How long is the shadow of the peg near New York (when shortest)? →

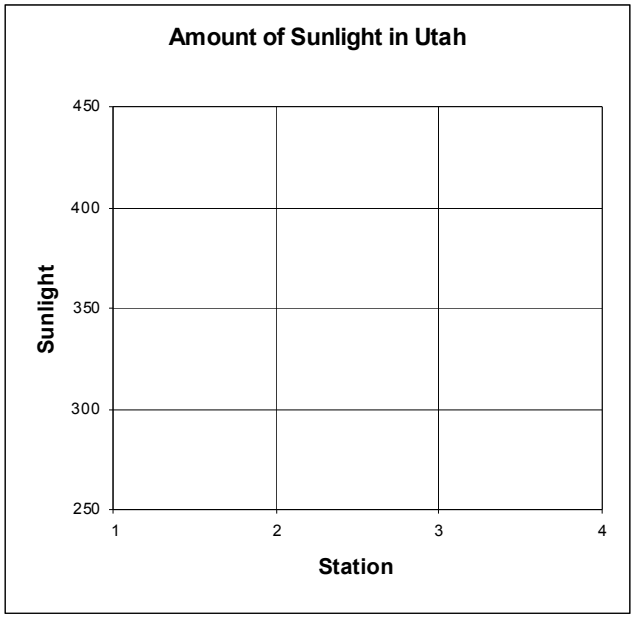


15) Is the Sun HIGH, MEDIUM or LOW in the sky when the peg's shadow is shortest <u>at this station</u>?

Data Analysis

DISTANCE Affect **TILT Affect**

TILT



Use different colors for Utah and Argentina

1) Which station represents Utah's Summer? Why?

2) Which has a greater affect, distance or tilt?

3) What is the reason that we have seasons?

4) Compare shadow length at each station. Which season has the longest shadows? __The Shortest? __ Why?