NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Seasons Interactive-Mrs. Weimer

Earth is always moving. Every day, Earth makes one rotation on its axis. This causes day and night. Every year, Earth makes one complete orbit around the Sun. Its axis always tilts in the same direction, so the parts of Earth that receive more direct sunlight and have more daylight hours change throughout the year. This causes seasons—times of the year with particular patterns of weather and daylight, which vary depending on where you live. Most places experience four seasons: spring, summer, autumn, and winter.

Go to the PBS Learning Interactive: <http://www.pbslearningmedia.org/resource/npls13.sci.ess.seasons/why-seasons/en/>. Click Launch for the interactive to begin.

Part 1-

1. Click on Earth’s orbit and draw the picture showing how we are on an ellipse.
2. Click on the sun’s path: the sun moves from \_\_\_\_\_\_\_\_\_\_\_\_\_to \_\_\_\_\_\_\_\_\_\_\_\_in the sky.
3. Equinoxes occur:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Click on the Sun’s Angle: When sunlight strikes Earth's surface more directly, it is more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When sunlight strikes at a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, it is less intense because it spreads over a larger area.

Part 2-

1. Position the Earth at December:
   1. Click through the cities:
      1. What is an equinox?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. What are the differences in sunlight angle:

|  |  |
| --- | --- |
| City | Sunlight angle |
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* + 1. The winter solstice in New York is the\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in Melbourne Australia

1. Position at March:
   1. Click through the cities:
      1. What is a solstice?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. What are the differences in sunlight angle:

|  |  |
| --- | --- |
| City | Sunlight angle |
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* + 1. The spring equinox in New York is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in aUSTRALIA.

1. Position anywhere:
   1. Click through the cities:
      1. What do you notice about Miami and Singapore?

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* + 1. How does being closer to the equator affect your daily activities?

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1. Conclusion:

You and a partner work together and describe how the seasons work in EXACTLY 25 words (5 points)

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