Supplies needed:

1. Colored pencils
2. 1 brad per person
3. Scissors
4. Copies of the pasta parallels pages
5. Glue (at end)
Key Question

How do the sun’s rays strike the Earth at different times of the year?
Background Information

Because Earth’s axis is tilted at 23.5°, the direct rays of the sun are focused on different areas of the globe at different times of the year.

The area receiving the most direct rays will receive much more solar energy than the parts receiving indirect, slanted rays.

The unequal heating of Earth drives our weather and causes seasons (changes in temperature, precipitation, amount of daylight, etc.).
Learning Goals

1. Explore the relationship between the tilt of the Earth and the distribution of our Sun’s rays
2. Understand that we have seasons on Earth because of the tilt of Earth and how the Sun’s rays fall upon our planet
Procedures

1. Each pair will get about 15 pieces of pasta (use these to measure each section on the graph)
2. Read the procedures on the page
Procedures

3. Make sure to color code both the graph key and the graph
Procedures

4. After coloring in graph, cut out both the globe and the half circle
5. Align the center of all three pieces then insert brad to hold together
6. It should look like the image in lower right-hand corner when complete
Last Key Steps

- Glue in the pasta parallels into your journal
- Answer the questions – if you do not finish the questions, they are homework due next class period.