## Seasons Poster

 $\rightarrow$  You have been hired by an educational publishing company to produce posters for middle school science classrooms. Your first poster is to be one that shows the causes of seasons on Earth.

 $\rightarrow$ Since many students have the wrong idea about what causes seasons (they think that they are caused by the Earth being closer to the Sun during the summer) it is very important that your poster be very accurate. Your poster will answer the question "What causes seasons"?

The Task: Using a sheet of drawing paper and map colors or markers to make your poster.

## The Process – You must show:

- A) the correct axis tilt (including degrees)
  - a. Explain how the tilt of the Earth is primarily responsible for seasonal changes.
- B) Revolution around the Sun
- C) Angle of Sunlight
- D) Direct and Indirect Sunlight
  - a. Explain how the sun's radiation through different amounts of atmosphere affect the intensity of the seasons at different locations on Earth.

## Conclusion

 $\rightarrow$  You should now have an understanding of the true causes of seasons. Think about this: what would happen if any one of the variables (angle, energy, tilt, & revolution) changed?

 $\rightarrow$ How would that affect the seasons?

 $\rightarrow$ Is there a relation between the height of the sun and the season of observation?

 $\rightarrow$ Is there a relationship between seasons and weather phenomena?

 $\rightarrow$  How does Earth move?

 $\rightarrow$  Why is Earth warmer at the equator and colder at the poles?

 $\rightarrow$ How do the Earth's motions of rotation and revolution affect seasonal climate change?