Intro to Atmosphere : Small-Group Discussion Questions:

Section 1:

1. Define the term **weather**. What does it mean? What affects the weather? What causes different weather patterns?

2. Look at the visual for this section. What does this tell you? How accurate is it? What affects the accuracy of this chart? Why is it so hard to predict the weather?

3. What does **direct observation** tell you about the weather? Can you look outside and predict the weather for tomorrow? Why or why not?

Section Two:

1. What causes the wind? List your ideas below.

2. How does the wind affect weather patterns?

3. Look at the visual for this station. What does the "Beaufort Scale" tell you? What does it compare? Is it an absolute scale? How could it be useful? What is a **knot**?

Section Three:

1. What is "temperature"? How is it measured? How does it relate to weather?

2. What is a *windchill factor*? Why is it important to know the windchill factor?

3. Look at the visual for section three. What does it tell you? What is the lowest wind velocity at which windchill becomes an issue? How is this related to temperature?

    What is the "combined windchill factor" at a wind of 6 km/h and a temperature of – 10 degrees Celsius? Explain how you would read this chart.

Section Four:

1. What is the composition of Earth's air?

2. What happens to the atmosphere as you move into higher altitudes?

3. What causes air to be more or less **humid**? Is the air on the west coast humid?

Section Five:

1. What is the Ozone Layer? What is it composed of, and why is it important?

2. Where is the Ozone Layer? How does it relate to the surface of the Earth?

** Once you are done as a group, read pg. 477 – 481 in the textbook to check your answers.