

# CHARACTERISTICS OF THE ATMOSPHERE

## Activity 1 - I Spy

We have covered 2 main Earth systems, the Earth's surface and space. Look at the list in the data table below. In the boxes to the side, write how each structure is related to another one of Earth's systems we have discussed so far in class.

OBJECT	EXPLAIN THE INTERACTION
1. Sunshine from the sun	
2. Clouds in the sky	
3. Dirt In the air	

## Activity 2 - Flying Rings

Materials – 1 balloon, plastic ring, piece of fleece, air

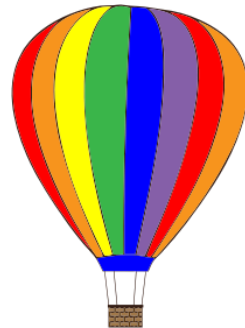
Your group has 3 minutes to use the following supplies to make the plastic ring fly.

1. How did you get the plastic ring to fly?
2. How does this experiment show there is air all around us?

## Activity 3 - Characteristics of the Atmosphere

Directions – Use pages **393 to 397** in the amazing book of knowledge (Red Earth Science Text book) to discover the following information.

3. The atmosphere is \_\_\_\_\_
4. That atmosphere is made up of
  - a. 78% \_\_\_\_\_
  - b. 21% \_\_\_\_\_
  - c. 1% \_\_\_\_\_ such as  
\_\_\_\_\_



5. What else is in the atmosphere?

### Atmospheric Pressure and Temperature

6. What is air pressure?

7. What keeps the atmosphere around the Earth?
8. Explain how a human pyramid explains the air pressure on Earth.
9. Why do the temperatures change at the different layers in the atmosphere?

### Layers of the Atmosphere

10. Complete the data table to explain the characteristic of each of the atmospheric layers.

Layer	Composition (gases in that layer) and Characteristics

11. Use the graph on page 394, to complete the data table, showing the air pressure (mB) and temperature (°C) of each layer.

Layer	Pressure (mB)	Temperature (°C)

12. How can the thermosphere have high temperatures but not *feel* hot?