

# Atmosphere Activity Bag

## Layers of the Atmosphere: Student Activity Guide

Have you ever wondered what's happening in the air far above us? This activity explores what happens in the atmosphere, and where it happens. You don't need to know these things as you begin. The goal is to think about it and discover some interesting things along the way.

These directions will get you started. Your teacher will be in contact to guide you and provide information.

### Materials From The Bag

- Atmosphere Diagram
- Atmosphere Event Cards (10 cards in total)

### Part 1: What is Happening in the Atmosphere? *What do you think?*

This part of the lesson is to see what you know without looking anything up. It's ok to be wrong; this is only the first part.




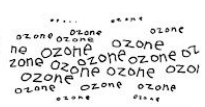




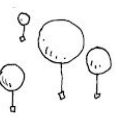
1. Get your Atmosphere Diagram from the bag. This shows the atmosphere from the ground at the bottom to space at the top. Height above the ground is marked in miles on one side and kilometers on the other.
2. Cut out the Event Cards on the right side of this page.
3. Each Event Card is something that happens in the atmosphere. Your challenge is to place the cards on the diagram where you think it happens.
4. For each Event Card, write your reasons for placing it where you did.
5. Once all the cards are in place, if possible, take a photo of the whole diagram.

### Part 2: What is Happening in the Atmosphere? *Rearrange your cards.*

Your teacher will provide information or sources of information about things that happen in the atmosphere. You can also do your own research to learn more about the atmosphere.

1. Using this information, move the Event Cards to their correct location.
2. Record the changes you made and what information led to those changes.  
After all changes have been made, take a photo to capture it, or tape the cards in place.

*Where did most of the atmosphere cards occur, and why do you think that is? What do you think the Earth would be like if it had no atmosphere?*

Most meteors burn up here.	
Highest air pressure.	
Weather and most clouds occur here.	
Ozone layer is found here.	
Space Shuttle orbits the earth here.	
Temperatures can exceed 1,500° C (2,730° F).	
Airplanes often fly here.	
Can be as cold as -90° C (-130° F).	
Weather balloons usually rise this high.	
80% of all the atmosphere gases are found here.	