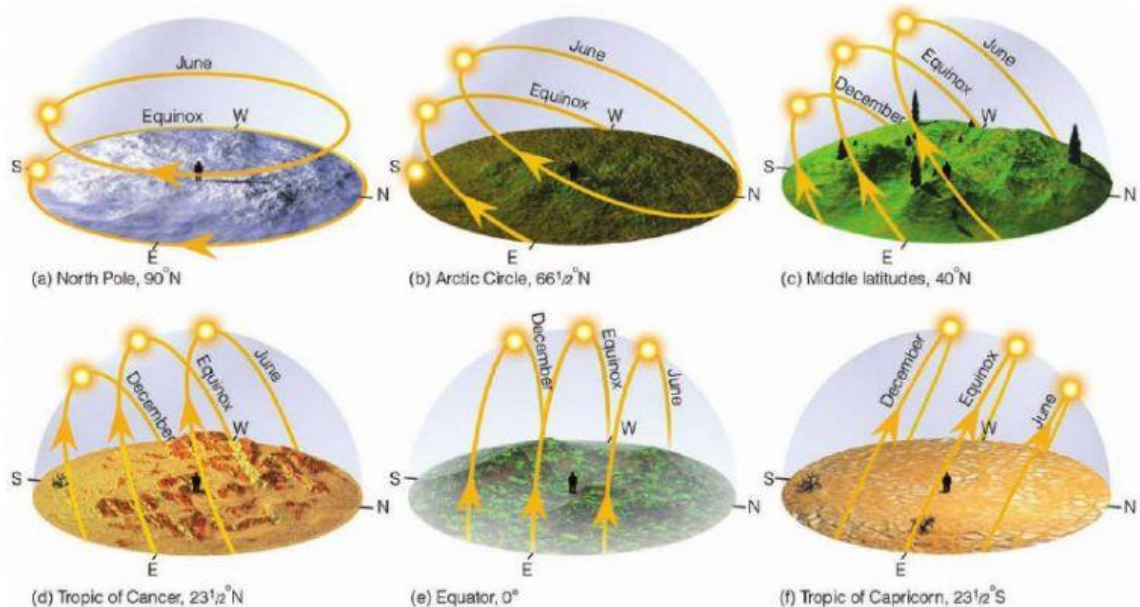


Introduction To Weather

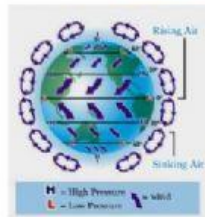


Temperature

- Heated air near a hot surface is less dense than the colder air above it.
- The heated air rises, forcing the colder air to move aside and sink toward the ground.
- Then this colder air is warmed by the surface, and it rises.
- **Wind** is created.

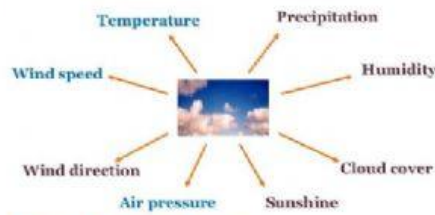


Convection cells



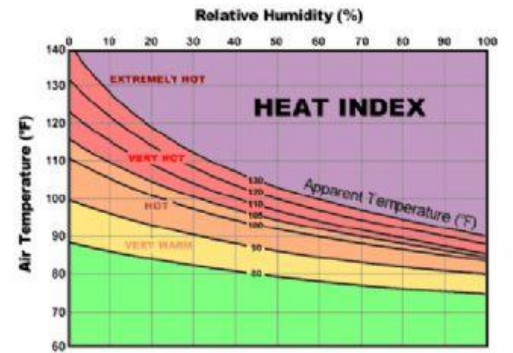
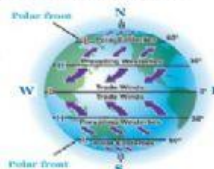
- The combination of global convection and Earth's rotation sets up a series of wind patterns called **convection cells**.

Introduction to Weather



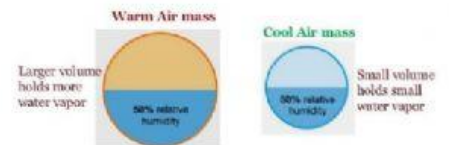
Air and water vapor

- Three important global wind patterns exist in each hemisphere:
 - Trade winds
 - Prevailing westerlies
 - Polar easterlies



Relative Humidity

- **Relative humidity** is a measure of how much water vapor an air mass contains.



1. What is humidity? What is relative humidity?

2. Explain what heat index is.

3. Why does water come out of the air at its dew point?

1. What is humidity?
2. What is water vapor?
3. What is absolute humidity?
4. What two factors does relative humidity consider?
5. What are you likely to see when the humidity is 100