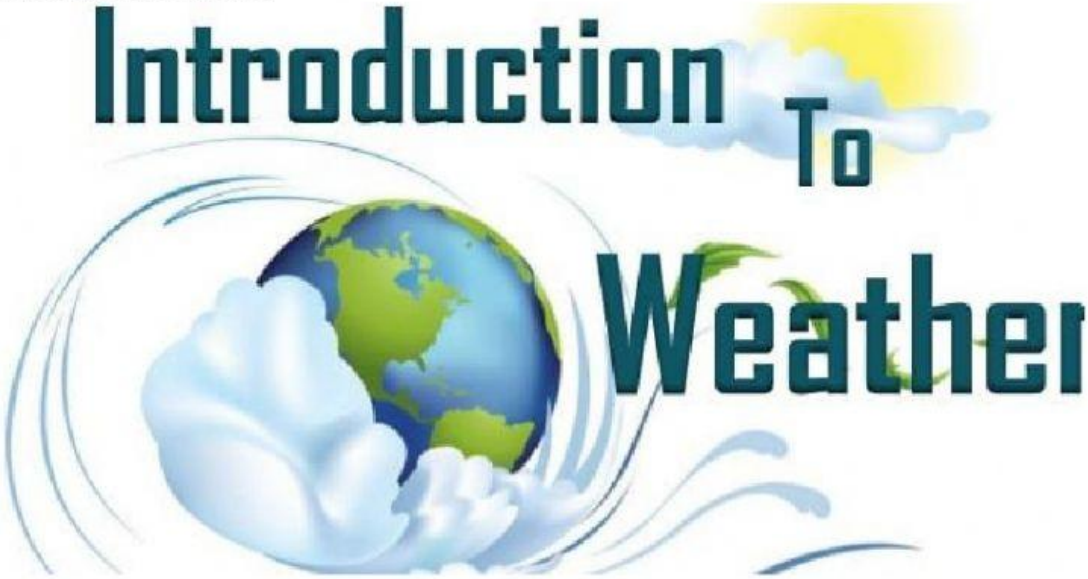
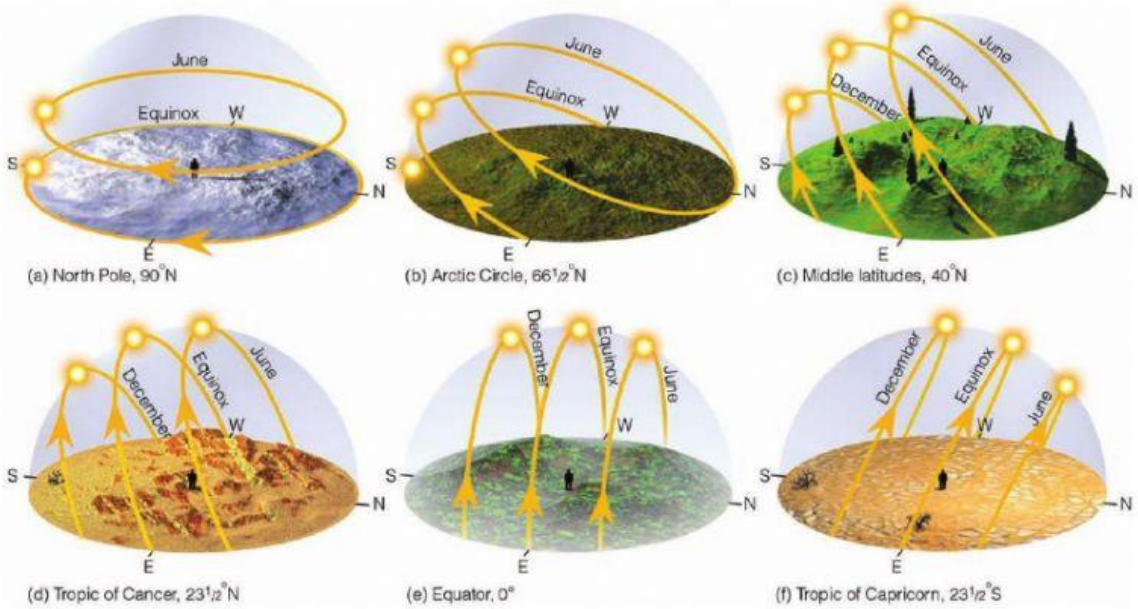
11.1 Introduction to Weather

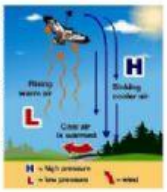


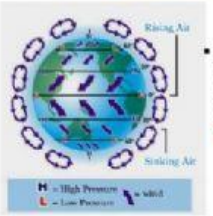

LIVEWORKSHEETS

## 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.

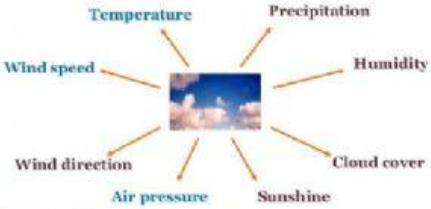



## Convection cells



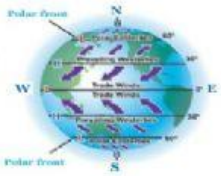

- The combination of global convection and Earth's rotation sets up a series of wind patterns called **convection cells.**

## Introduction to Weather



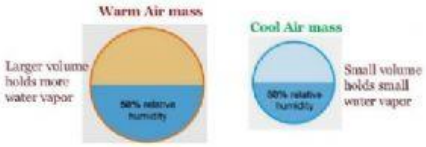

## Air and water vapor

- 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.




LIVEWORKSHEETS

1. Compare and contrast weather and climate.

2. What factors account for a location's weather?

3. Describe how unequal heating causes weather.

LIVEWORKSHEETS

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