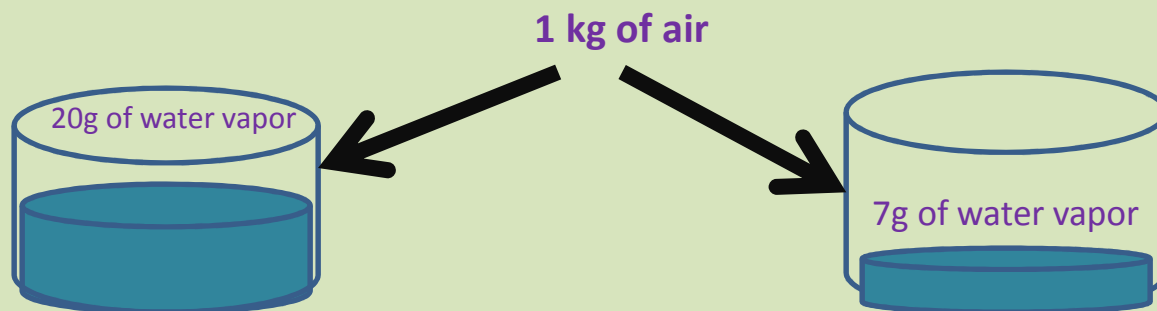


# Humidity

- **Humidity** is a term used to describe **the amount** of water vapor in the air
  - Ex: The air in the room has 97% humidity
- **Saturation** is a term used to describe how much water vapor a kilogram of air needs in order to be considered full
  - Ex: **warm** air can hold **more** water vapor than **cold** air

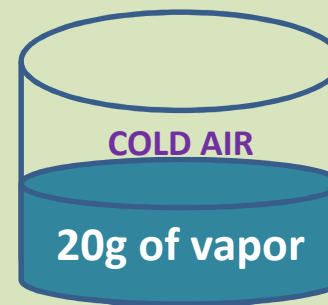
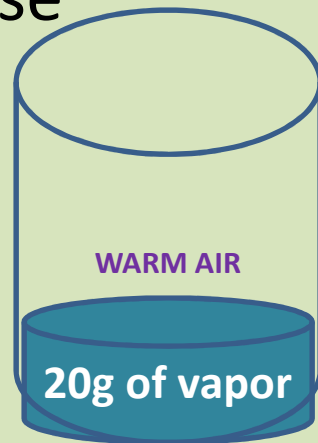
# Relative Humidity

- **Relative humidity is a term used to describe how much water vapor the air will hold a certain temperature**
  - **Ex: When it is 77F degrees outside then 20 grams of water vapor is needed in every kilogram of air for the air to be fully saturated**
  - **Ex: When it is 50F degrees outside then only 7 grams of water vapor is needed in every kilogram of air for the air to be fully saturated**



# Relative Humidity

- If the amount of water vapor in the air does not change, then
  - 1) as temperature decreases relative humidity will increase
  - 2) as temperature increases relative humidity will decrease



The cold air is now holding more water vapor per section of air than the warm air. Remember- the amount of water vapor is the same, but warm air can store more vapor than cold air

# Dew Point

- The **dew point** is the temperature at which the water vapor in the air condenses into liquid water.
  - High dew point = moist air
  - Low dew point = dry air