SKY WATCHER CHART

High Clouds: cloud bases 16,000 - 50,000 ft (5-15km)

- H1: Cirrus
  - In the form of filaments, strands, or hooks
- H2: Cirrus
  - Dense, in patches or sheaves, not increasing, or with tufts
- H3: Cirrus
  - Often arched shaped remains of a cumulonimbus
- H4: Cirrus
  - In hooks or filaments, increasing, becoming denser
- H5: Cirrostratus
  - Cirrus bands, increasing, below 45° elevation
- H6: Cirrostratus
  - Cirrus bands, increasing, veil above 45° elevation
- H7: Cirrostratus
  - Translucent, completely covering the sky
- H8: Cirrostratus
  - Not increasing, not covering the whole sky
- H9: Cirrostratus
  - Alone or with some cirrus or cirrostratus

Middle Clouds: cloud bases 6,500 - 23,000ft (2-7km)

- M1: Altocirrus
  - Mostly semi-transparent, sun or moon may be dimly visible
- M2: Altocumulus
  - Dense enough to hide the sun or moon
- M3: Altocumulus
  - Semi-transparent, one level, cloud elements change slowly
- M4: Altocumulus
  - Lens-shaped, or continuously changing shape and size
- M5: Altocumulus
  - One or more bands or layers, expanding, thickening
- M6: Altocumulus
  - From the spreading of cumulus or cumulonimbus
- M7: Altocumulus
  - One or more opaque layers, w/o altocirrus or nimbostratus
- M8: Altocumulus
  - With cumulus-like tufts or turrets
- M9: Altocumulus
  - Chaotic sky, cloud bases at several levels

Low Clouds: cloud bases Up to 6,500 ft (0-2km)

- L1: Cumulus
  - Cumulus of fair weather with flattened appearance
- L2: Cumulus
  - Moderate/strong vertical extent, or lowering cumulus
- L3: Cumulonimbus
  - Tops not fibrous, outline not completely sharp, no anvil
- L4: Stratus
  - From the spreading and flattening of cumulus
- L5: Stratus
  - Not from the spreading and flattening of cumulus
- L6: Stratus
  - In a continuous layer and/or ragged shreds
- L7: Stratus Fractus
  - And/or Cumulus Fractus occurs with rain or snow
- L8: Cumulus & Stratus
  - Not spreading, bases at different levels
- L9: Cumulonimbus
  - With fibrous top, often with an anvil

Typical Types: Cirrus (Ci), Cirrostratus (Cs), Cirrocumulus (Cc), Altostratus (As), Altocumulus (Ac), NIMbostratus (Ns), Stratus (St), Stratocumulus (Sc), Cumulus (Cu), Cumulonimbus (Cb)
The water on Earth is always on the move, changing state from liquid to vapor back to liquid and snow and ice near the poles and mountains. The process used to describe the continuous movement of water between the Earth and atmosphere is known as the water cycle, and is often referred to as the hydrologic cycle. There is no beginning or end to the water cycle; it behaves much like a ferry wheel at an amusement park, moving around and around.

Cloud Cover
- Determination of the amount of cloud cover is done by estimating the percentage of the sky covered with clouds. This is one of several possible scales or categories for cloud cover.

Visual Opacity
- Opaque
- Translucent
- Transparent

Cloud Level
- Three levels of clouds have been identified based on the altitude of a cloud's base.

Ever wonder how clouds got their names? Well you may be surprised to find out!

In 1803 Luke Howard used Latin terms to classify four main cloud types.
- Cumulus means pile and describes heaped, lumpy clouds.
- Cirrus, meaning hair, describes high level clouds that look wispy, like locks of hair.
- Featureless clouds that form sheets are called Stratus, meaning layer.
- The term Nimbus, which means ‘precipitating cloud’, refers to low, grey rain clouds.
- Alto is used to describe mid level clouds.
- Finally, convective clouds have a vertical development extending through large portions of the atmosphere.

The Earth’s Water Cycle