



Heat Transfer in the Atmosphere

R - Radiation
Cv - Convection

Cd - Conduction
LH - Latent Heat

Identify the mechanism(s) responsible for heat transfer for each of the items listed below.

- (a) Heat is carried by air currents (wind)
- (b) Typically heats (not cools) the ground
- (c) Water is a major ingredient
- (d) Can pass heat through a solid object (more effective with solid objects than with air)
- (e) Ocean currents transfer heat in this way
- (f) Requires a temperature gradient
- (g) Distinguished by a wave-like character
- (h) Requires a liquid and a gas (or a liquid and a solid)
- (i) How heat is transferred away from the surface of the moon
- (j) Only effective in the lowest 3 mm of the atmosphere
- (k) How the handle of a pot on a stove gets hot
- (l) thermals transfer heat in this way
- (m) evidenced by a hawk circling and climbing high while keeping its wings motionless
- (n) results in our bodies feeling chilled right after getting out of the pool
- (o) how water is usually brought to a boil
- (p) how boiling water cools down once away from the heat element