

Cut out the flash cards and place them on your index cards with tape or glue.

Front of
Flash Card

Back of
Flash Card

Heat	The flow of electrons
Kinetic theory	All matter is made up of particles that are constantly in motion.
temperature	The average kinetic energy (speed) of particles
Absolute Zero	0 Kelvin; the temperature at which there is no heat present; no motion of particles
thermal EXPANSION	Adding heat to particles will cause them to SPEED UP and SPREAD OUT Removing heat from particles will cause them to SLOW DOWN and CONTRACT
thermal CONDUCTOR	A substance that easily allows the transfer of heat
thermal INSULATOR	A substance that slows (or stops) the transfer of heat
specific heat	The rate at which a substance rises in temperature as it absorbs heat energy. Not all substances heat up at the same rate.

Conduction	The transfer of heat through DIRECT CONTACT .
Convection	The transfer of heat through fluids (liquids and gases) by creating a circulation of changing densities.
Radiation	The transfer of heat with an electromagnetic wave known as infrared .
electromagnetic wave	The energy that is produced by vibrating charged particles (electrons).
The speed of light	300,000,000 meters per second
light year	The distance light can travel in a vacuum in one year of time.
crest	The top of an wave.
trough	The bottom of an wave.
wavelength	The distance from the crest of one wave to the crest of the next wave.
frequency	The number of waves that pass in a second. It is measured in Hertz.
The Electromagnetic Spectrum	A listing of all the frequencies (wavelengths)of radiation that can be produced.
reflection	Waves that bounce off of a material that it cannot pass through.
refraction	The changing of speed and direction as a wave passes through a different medium.
absorption	The transfer of light energy to the particles of matter.

diffraction	The change in the direction of a wave as it bounces off of an irregular (not smooth) surface.
convex lens	With a shape that bows out on both sides, this lens FOCUSES the light to a point and then flips the image past that point.
concave lens	With a shape like an hourglass, this lens spreads out the light that passes through it.
mirror	A surface that reflects all light.
Sound	A form of energy that is caused by vibrations of matter.
transverse wave	A wave that has up and down vibrations of energy.
medium	The substance a wave is traveling through.
compressional wave	A wave of energy that travels through matter as a back and forth vibration (rather than up and down).
amplitude	The "height" or intensity of a wave.
speed of sound	Cannot exist in a vacuum. It travels in gases and liquids but is fastest when going through solids.
pitch	The quality of sound that describes how high or low a tone is.
Doppler Effect	The observed change in the pitch (frequency) of a sound coming from a moving source or reaching a moving observer.