

**transparent**

allows all light  
to pass  
through, casts  
no shadow

**translucent**

allows some  
light to pass  
through, casts  
a fuzzy shadow

**opaque**

allows no light  
to pass  
through, casts  
a dark shadow

**crest**

the highest  
point on a  
wave

**trough**

the low area  
between  
waves

**reflection**

the bouncing  
back of light  
waves

**refraction**

the  
bending of  
light waves

**wavelength**

the distance  
crest to crest,  
or 2 like areas,  
on a wave

frequency

the number of times a wave is repeated in a time period

pitch

the highness or lowness of a sound

compression

an area where sound waves are pressed together

rarefaction

an area where sound waves are spread apart

**visible light spectrum**

the part of the electromagnetic spectrum that most humans can see

**echolocation**

using sound waves to locate objects

**vacuum**

a place where there is no matter

**vibration**

a complete crest and complete trough on a wave