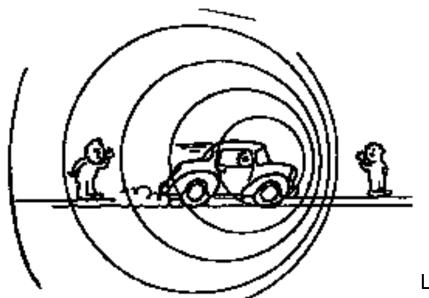
Redshift Page 1

Energy moves in the form of waves.

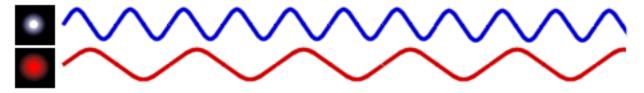


Let's take sound, for instance. When a car is moving toward you, honking, the sound waves compress, and the sound gets higher-pitched. This is called the Doppler Effect.

Redshift Page 2

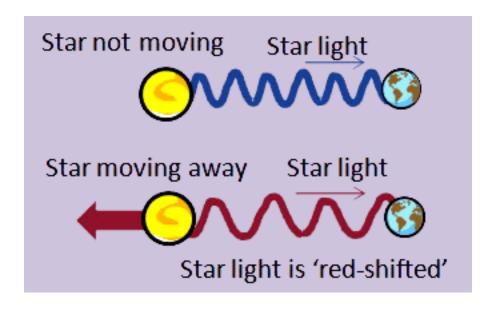
It's the same idea with color. Below is the color spectrum.

When an object is moving closer to you, its color waves compress, just like sound, and emits a blue light. When it is moving away from you, it emits a red light.



Redshift Page 3

The astronomer Edwin Hubble looked through his telescope and observed that almost all galaxies emitted a reddish light.



He concluded that the universe is expanding.

Fun fact: One galaxy that is emitting a blue light is the Andromeda Galaxy, which is the closest galaxy to us.