

Vocabulary:

Light: a kind of energy that helps us see. This includes man-made sources of light (examples: a lightbulb, a glowstick) as well as natural sources of light (examples: some mushrooms, the sun, the moon).

Emit: an object that emits light produces its own light (examples: stars, sun, a lightbulb, fire); an object that emits light will also produce heat.

Reflect: When an object is reflective, it allows light to bounce off of it. An object that produces light by reflecting cannot emit its own light. Rather, it depends on another light source to reflect and create light. For example, the sun shines on the moon to produce light- the moon cannot produce its own light.

Luminescent: An object that is luminescent produces light through a chemical or physiological (involving the body) reaction. A luminescent object produces light but no heat (examples: mushroom, jellyfish, fireflies, glowstick).

Please write the following vocabulary words in your Light & Shadow Foldable.

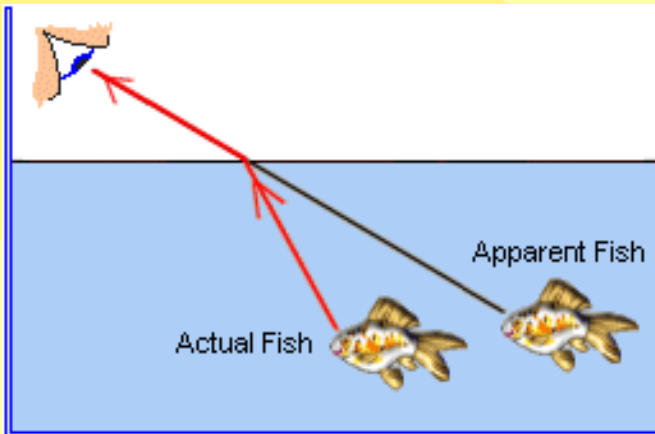
Opaque: an object that blocks all the light; no light can pass through

Transparent: an object that allows all the light to pass through; you can see through it clearly

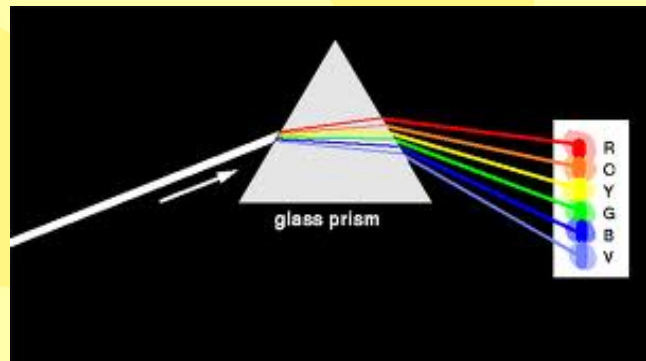
Translucent: an object that allows some of the light to pass through; you can see through it but not clearly



Refraction: light bends or changes direction when it changes from one medium into another, for example, when it travels from air into water. This can create an optical illusion.



Prism: A glass or transparent solid body with triangular bases, which uses refraction to break light into its colour spectrum or for reflecting rays of light.



Light and Shadow Vocabulary

Please copy the following definitions into your light and shadow foldable:

Lens: A piece of glass or other transparent substance with curved sides for concentrating or dispersing light rays.

gather in *spread out*

Concave lens: a lens curved like the inner surface of a spoon. Concave lenses spread the light out.

Convex lens: a lens curved like the back of a spoon. Convex lenses bend the rays of light to one point once they pass through the lens.

Discussion:

Lens: A piece of glass or other transparent substance with curved sides for concentrating or dispersing light rays.

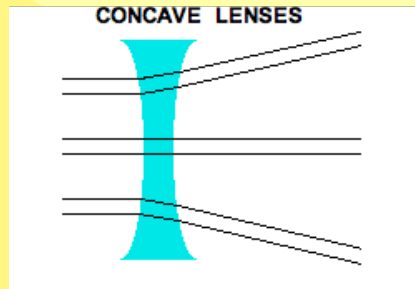
Where do you see lens in our environment?

Concave lens: a lens curved like the inner surface of a spoon. Concave lenses spread the light out.

What are some examples of concave lens in our environment?

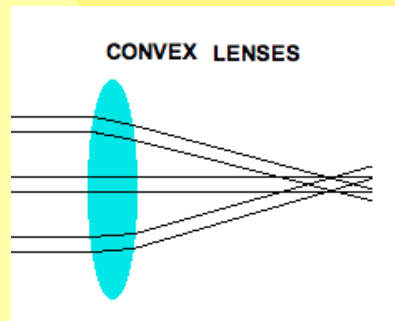
Convex lens: a lens curved like the back of a spoon. Convex lenses bend the rays of light to one point once they pass through the lens.

What are some examples of concave lens in our environment?



A concave lens minimizes (It makes something look smaller).

Examples: a peephole, glasses for nearsighted people (people who need help seeing far away). In a convenience store, they use a concave mirror to see more of the store.



A convex lens magnifies (make something look bigger).

Examples: a magnifying glass, a telescope, a microscope, a lens in a camera, and glasses for farsighted people (people who need help seeing close up)