Lenses are mostly made of glass or plastic. Both materials share the characteristic of being transparent. Therefore they let the light pass, which equals to see trough the lens.

In general the lenses are made in order to manipulate the light, which passes the lens. By using lenses you can manipulate a object appearing: smaller, bigger, upside down or stretched.

You distinguish between two kinds of lenses: convex lenses and concave lenses.

Convex lenses have a shape like a ellipse. So the main surface is bended and focuses incoming parallel sunbeams to one focal point, which depends on the size and the bend of the lens.

Concave lenses are look like the trunk of a tree. The ends of the lens are wider and its width decreases the more you are reach the center of the lens. Parallel incoming light beams spread after passing the lens.

Therefore the objects, which are watched trough a lens are manipulated. We are using this effect in simple devices like magnifying glasses or in more complex devices like the lenses of reflex cameras.