

Esiw Funhouse

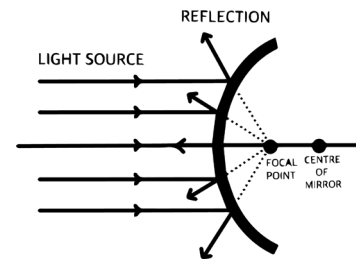
This activity was created by Shannon.

How we see objects depends on how the surrounding light rays interact with them. Light can be reflected, refracted or absorbed. The law of reflection says that when a ray of light hits a surface, it bounces a certain way. Knowing this, let's analyze mirrors to explain the properties of reflected light.

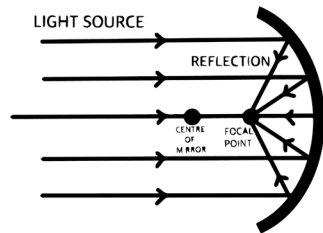
DEFINITIONS

A **MIRROR** is a reflective surface that bounces off light, thus producing an image visible to us. Surely you're familiar with plane mirrors, which are the simple flat mirrors that can be found almost anywhere. But what about double-sided table mirrors? Or the rounded ones you see hanging from the ceiling in stores for security? There are two types of these curved mirrors: convex and concave.

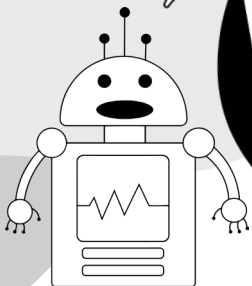
A **CONVEX MIRROR** is curved where the reflective surface bulges out towards the light source. This bulging surface produces images that make objects appear smaller but gives a wider, rounder angle of view. Your rear-view mirrors in your car, and the security mirrors found in stores are examples of these.



A **CONCAVE MIRROR** is curved where the reflective surface caves in from the light source. They can reflect in two different ways: If the object is close, the mirror will magnify it a great deal. If the object is farther away, however, the mirror will make it appear smaller and inverted. You find these mirrors on vanities that people use for shaving.



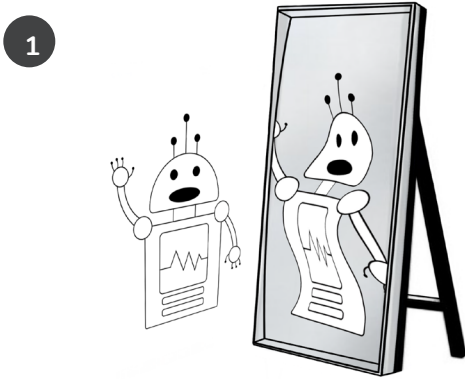
Did you know computers have the ability to reflect too? There is a process where computers can metaprogram, meaning the computer itself can write its own programs! It takes variables, such as its own conditions, and relevant information into account to define properties. For example, think of you walking in a park. If in your travels you see an obstacle in your path, you acknowledge it and adapt by either stepping around or over the object. Just like you, a **reflective program** has the ability to think about what is happening and can alter itself to the circumstances.



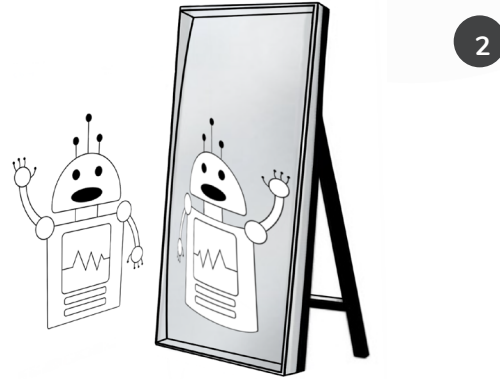
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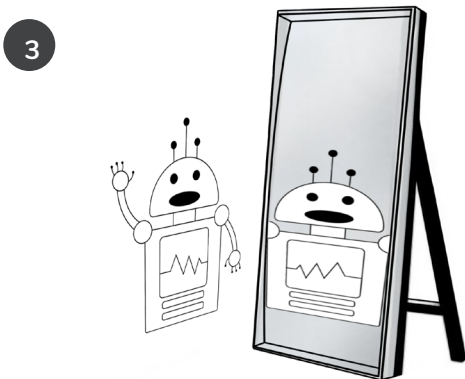
Funhouse mirrors, a main attraction to carnivals, use concave and convex mirrors to alter your appearance. Can you state which mirror is used in each scenario? Your options are: Concave, Convex, or Combination of Both



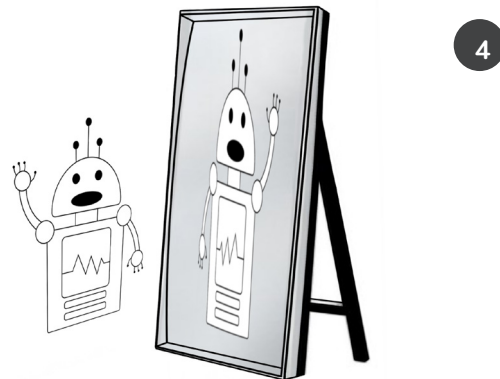
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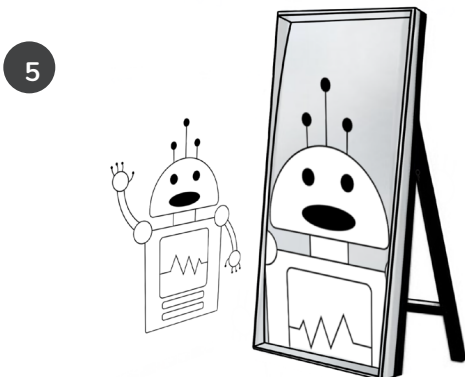
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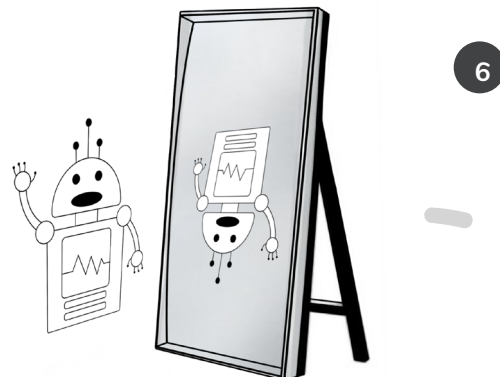
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