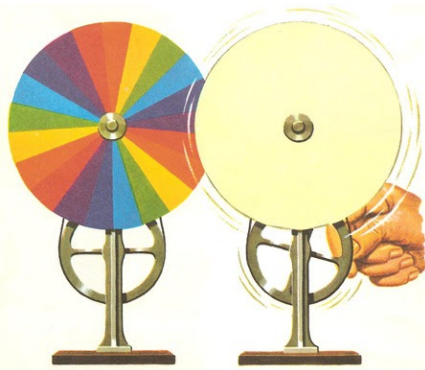


Persistence of Vision plays a role in keeping the world from going pitch black every time we blink our eyes. Whenever light strikes the retina, the brain retains the impression of that light for about a 10th to a 15th of a second



(depending on the brightness of the image, retinal field of view, and color) after the source of that light is removed from sight. As a result, the eye cannot clearly distinguish changes in light that occur faster than this retention period. The changes either go



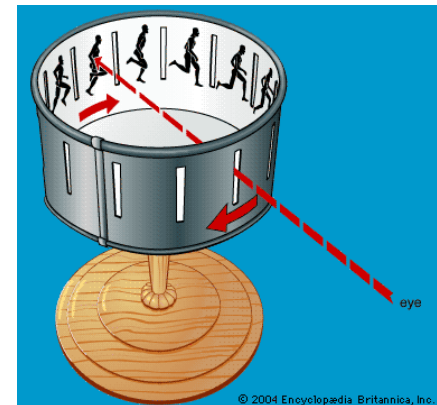
unnoticed or they appear to be one continuous picture to the human observer.

The psychological partner to persistence of vision is called the phi phenomenon. This is the mental bridge that the mind forms to conceptually complete the gaps between the frames or pictures.

There is a toy called a zoetrope that uses persistence of vision to make it appear such that there is a moving image. This toy can be easily made.

## Materials

- Printout
- Paper Plate
- Scissors
- Tape
- Pencil
- Cardstock



When the Zoetrope Spins persistence of vision allows the image to appear to be moving!