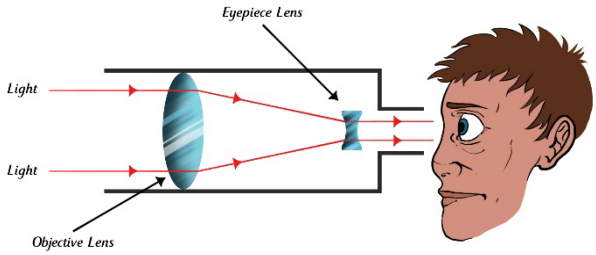
How does a Telescope Work?

A telescope makes faraway objects look closer and lets you see them better. This text explains how a telescope works.

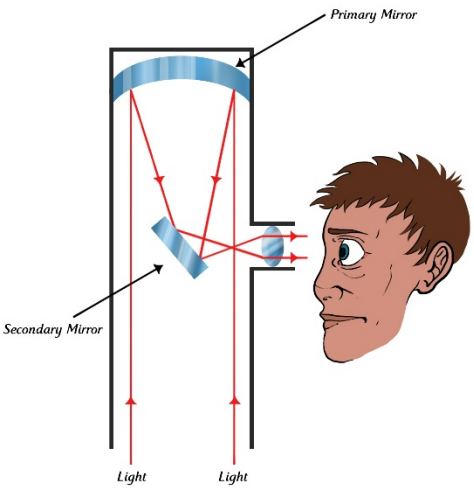
Different types

There are two main types of basic telescope.
The refractor telescope uses a glass lens.
The reflection telescope uses mirrors.



The refractor telescope

A refractor telescope collects light through a special lens called an objective lens. When you look at a faraway object, like a star, the objective lens collects the light. The light then travels along the telescope and through an eyepiece. The eyepiece is like a magnifying glass, it makes the object look bigger.



The reflection telescope

A reflection telescope collects light through a mirror called a primary mirror. Again, the light travels through the telescope to the eyepiece. The eyepiece makes the object look bigger.

Bigger images

If the objective lens or the primary mirror is big, it can collect more light. This means that you see a bigger and more detailed image.

Did you know?

The Hubble Space Telescope is one of the most famous telescopes in the world. It was sent into space in 1990. It travels around the Earth at a speed of 5 miles per second. It has taken some amazing pictures of deep space.

Text Marking

1. Underline the special words about telescopes in blue.
2. Draw a green line around the sub-headings.
3. Draw a red line around the labelled diagram of a refractor telescope.
4. Draw a purple line around the labelled diagram of a reflection telescope.
5. Draw a pink line around the opening statement.

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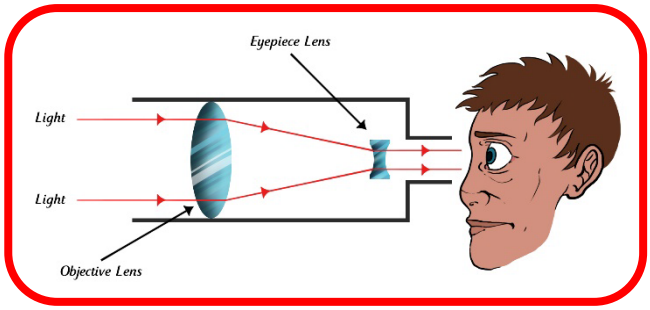

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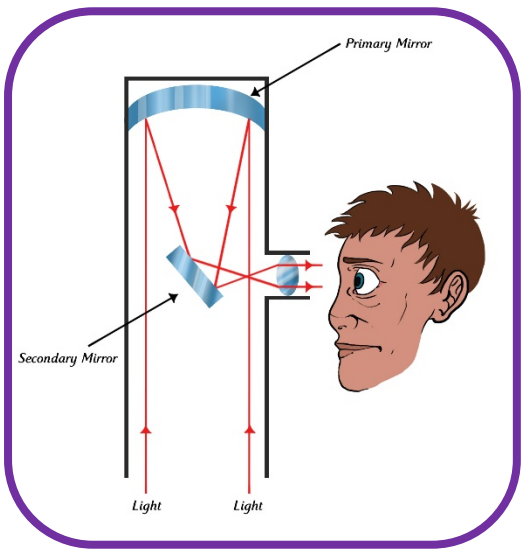

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