How Does a Telescope Work?

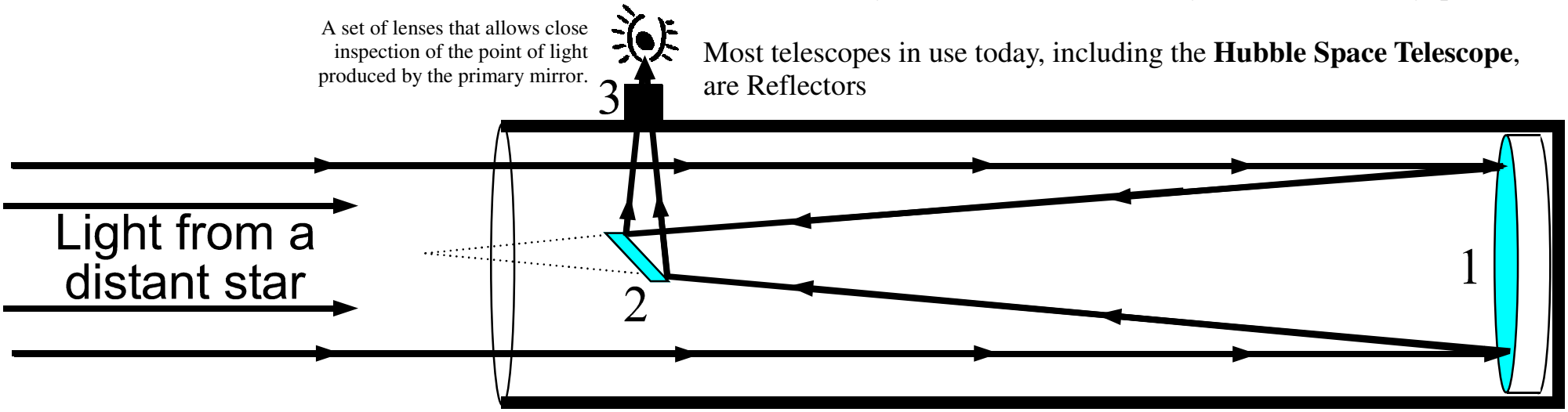
Examine: A Newtonian Reflector

Designed by Sir Isaac Newton in 1668, the **Newtonian Reflector** is a simple yet powerful telescope that uses a focused mirror to gather light. The three main parts of a Newtonian Reflector are:
1 - The Primary Mirror 2 - The Secondary Mirror 3 - The Eyepiece

Most telescopes in use today, including the **Hubble Space Telescope**, are Reflectors

3. Eyepiece

A set of lenses that allows close inspection of the point of light produced by the primary mirror.



Important Reflectors:

Name	Primary Mirror Size	Location
Keck	10m	Mauna Kea, Hawaii
Hobby-Eberly	9.2m	Mt. Fowlkes, TX
Subaru	8.3m	Mauna Kea, Hawaii
Gemini	8.1m	Cerro Pachon, Chile
Hale	5m	Palomar Mountain, CA
Starfire	3.5m	Kirtland AFB, NM
Sloan	2.5m	Apache Point, NM
Hubble	2.4m	Low Earth Orbit

2. Secondary Mirror

A flat, highly reflective mirror that re-directs the focused light from the primary mirror to an eyepiece.

1. Primary Mirror

A concaved (bowl shaped) highly reflective mirror, built to gather light across its entire surface onto a single point. The larger a telescope's primary mirror, the more light it gathers and the better the image. The most important part of a Newtonian Reflector is its primary mirror.

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