

# Exploring Space

The study of objects in space is **astronomy**. A scientist who studies objects in space is an **astronomer**. Astronomers use devices, including telescopes to study distant objects in space.

A **telescope** is a device that makes objects that are far away, appear closer. Some telescopes collect more light than the unaided eye can see. A light telescope collects visible light and uses it to form images of distant objects.



One of these telescopes is called a **Refracting telescope**. It uses lenses to form objects. Another type of light telescope collects light with a saucer-shaped mirror. This is called a **Reflecting telescope**.

Scientists now have a reflecting telescope out in space. It is called the **Hubble Space Telescope**. This telescope is designed to be in orbit around Earth and to send images to Earth from space.



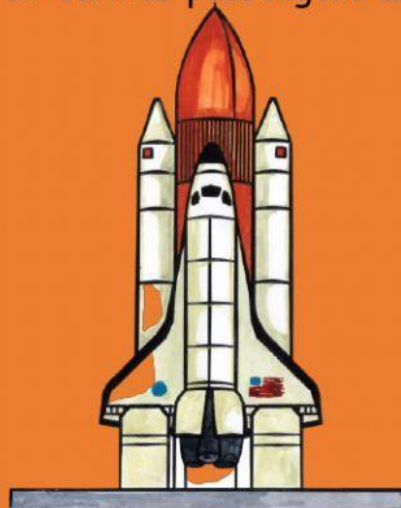
Hubble Space  
Telescope

Scientists use special crafts to explore space. The crafts are pushed into space by powered rocket engines. Three types of spacecrafts are presently being used.

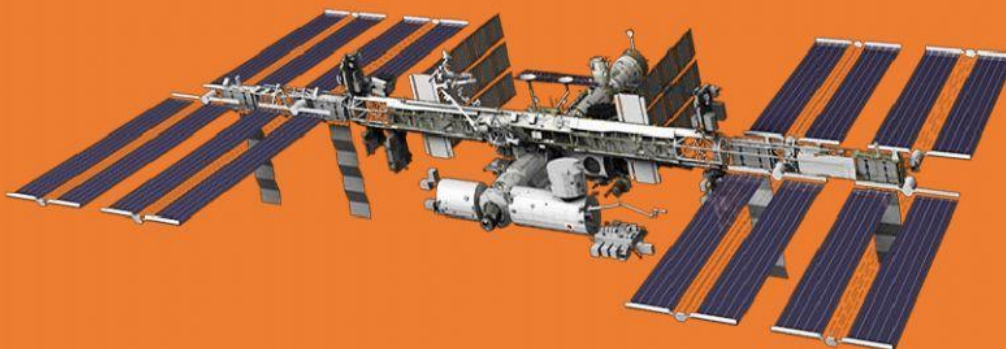
The **space probe** does not carry humans. It gathers data about objects in space and sends that information back to earth to be processed.



One of the most useful spacecrafts is the **space shuttle**. A space shuttle is a vehicle composed of giant fuel tank, large rocket (engine) and an orbiter. The orbiter can be launched into space and returned to earth. It carries passengers and equipment.



A **space station** is a space craft that is in space at all times. This is where scientists live while working in space.



The two countries that have done the most work in space are the U.S.A. and Russia. Other countries involved in space exploration are China and a group of European countries.