~ ~ ~ *PAS Astronomy Day Space and Technology Treasure Hunt Puzzle* ~ ~ ~

A1. We use a _ _ _ _ _ _ _ _ _ _ to look at far-away objects in space.
(11) (7) (15)

A2. _ _ _ _ _ _ _ _ are rocks or specks of dust that are seen as bright streaks in the sky when they fall
(16) (2) (13)

through the earth's atmosphere. If they land on earth they are called _ _ _ _ _ _ _ _ _ _ .
(16) (2) (13)

A3. A _ _ _ _ _ _ _ is a large object that revolves around a star in a path called an "orbit".
(5) (14) (3)

A4. In the night sky we can see bright _ _ _ _ _ . They are really like our sun, but much farther away.
(1) (12) (4)

A5. A _ _ _ _ _ _ _ is made up of billions of stars. It can be shaped like a spiral or an oval.
(9) (17)

A6. A _ _ _ _ _ _ produces a concentrated beam of light that can be used for pointing.
(6) (10) (8)

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B1. A _ _ _ _ _ _ _ _ _ _ uses a _____ or a _____ to focus light
(11) (7) (15)
and make things look larger.

B2. There are three kinds of _ _ _ _ _ _ _ _ _ _ _ . One kind is _____ .
(16) (2) (13)

B3. _____ is a _ _ _ _ _ _ _ that revolves around the sun.
(5) (14) (3)

B4. _ _ _ _ _ _ produce light and heat by "burning" _____ into _____ .
(1) (12) (4)

B5. We live in the _____ _____ _ _ _ _ _ _ _ .
(9) (17)

B6. A _ _ _ _ _ _ , along with a special mirror left by Apollo astronauts, has been used to measure
(6) (10) (8)

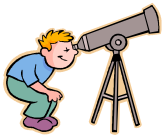
the _____ to the moon.

_ _ _ far into _ _ _ _ _ with _ _ _ _ _ _ _ _ _ _ _ _ _ !
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17)

Visit **Phoenix Astronomical Society** on the web at www.pasaz.org.

PAS Astronomy Info Page

Telescopes



We use a telescope to look at far-away objects in space. A telescope uses a lens or a mirror to focus light and make things look larger. One of the first people to use a telescope was Galileo, around the year 1600. Galileo discovered that Jupiter has moons, and the sun has sunspots. We can use a telescope too, to see Jupiter's moons, Saturn's rings, and faraway nebulas and galaxies.

Meteors

Meteors are rocks or specks of dust that are seen as bright streaks in the sky when they fall through the earth's atmosphere. If they reach the earth they are called "meteorites". There are three kinds of meteorites – stony, iron, and stony-iron. Most meteors are debris left by comets that had passed through that area of space at an earlier time. When the earth crosses the path where a comet had gone by in the past, we can see a "shower" of meteors – for example, the Perseid meteor shower in August, or the Leonid meteor shower in November.

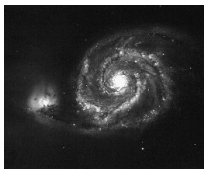
Planets

A planet is a large object that revolves around a star in a circular or oval path called an "orbit". Our sun is a large star with nine planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. Planets have also been discovered around other stars in space.

Stars

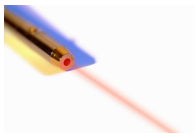
In the night sky we can see many bright stars. They are really like our sun, but much farther away. Stars produce light and heat by "burning" hydrogen into helium, in a process called nuclear fusion. If we look closely at the stars in the sky, we can see that they are different colors. Blue and white stars are the hottest; red are the coolest; and yellow (like our sun) are in-between.

Galaxies



A galaxy is made up of billions of stars. It can be shaped like a spiral or an oval. Most galaxies are very far away - so far that it takes millions of years for their light to reach us. But one galaxy is very close: it is the Milky Way galaxy where we live. The earth, the solar system, and the stars that we see in the night sky are all part of the Milky Way galaxy.

Lasers



A laser produces a concentrated beam of light that can be used for pointing. Lasers have many other uses, too. Doctors can do very delicate surgery using a laser. And a laser, along with a special mirror left on the moon by Apollo astronauts, has been used to measure very exactly the distance from the earth to the moon. Scientists can use this information to learn more about the earth, the moon, and gravity.