

NAME _____

DATE _____

CLASS _____

STUDY GUIDE

Chapter 20

The Optics of Mirrors

Text Pages 512-517

Use the terms in the list below to fill in the blanks in the paragraphs about mirrors.

- | | | | | | |
|----------|--------|--------|---------|---------|-------------|
| reversed | smooth | eyes | concave | focal | smaller |
| reflect | behind | ray | convex | optical | upside down |
| virtual | plane | length | real | spread | upright |

Mirrors can be formed by almost any _____ surface. Flat mirrors made from glass with a reflective coating on the back surface are called _____ mirrors. To see your face in a mirror, light has to _____ off your face. This light goes to the mirror and is reflected toward your _____. The image you see will be _____ from left to right. To explain this requires the use of a _____ model. The image will appear to come from _____ the mirror. Since there is nothing behind the mirror, this image is called a _____ image.

Mirrors that have a curve like the bowl of a spoon are called _____ mirrors. A straight line going through the center of a mirror is called the _____ axis. Beams of light parallel to this axis will strike a concave mirror and be reflected to pass through a point on the optical axis called the _____ point. The distance from the center of the mirror to the focal point is called the focal _____. When a concave mirror is used to reflect light from an object that is placed farther from the mirror than the focal point, the image formed will be a _____ image. The image will be enlarged and _____. If the object is placed between the focal point and the mirror, an image is seen that is enlarged in size, _____, and seems to be _____ the mirror. Because the image appears to be behind the mirror, it cannot be projected onto a screen like a real image and is therefore called a _____ image.

A type of mirror like the back of a spoon is called a _____ mirror. The rays that are reflected from this mirror are always _____ out. When this happens, the image will appear to be behind the mirror and be upright but _____ than the original object.

What is your height in centimeters? _____

In order that you are able to see a full length view of yourself the minimum size for a plane mirror must be _____ cm.