

Topic 3.4 Questions

How does light behave when it is reflected?

1. Make a simple, accurate diagram in which you show and label the following: (USE A RULER)
 - a. Incident ray
 - b. Reflected ray
 - c. Normal
 - d. Angle of incidence
 - e. Angle of reflection

2. Draw and label a mirror that produces: a) divergent light rays b) convergent light rays
(USE A RULER for light rays)

3. Explain the difference between divergent and convergent light rays.

4. One side of a soup spoon is convex and the other is concave. Imagine you are having soup and you lift the spoon out of the soup bowl, holding some soup. Is the part of the spoon touching the soup convex or concave? (diagram may be helpful in your explanation)

5. Suppose you find a shiny metal bowl that has been left outside in the sunlight. Is it more dangerous to look at the outside or the inside of the bowl? Explain

6. List several uses of:
 - a. Plane mirrors _____
 - b. Concave mirrors _____
 - c. Convex mirrors _____

7. Describe all the ways that an image in a mirror can differ from the original object.