

3. You will be using a ray box to explore how light behaves when it strikes the surface of concave and convex mirros. Use the plate with either 3 or 5 slits.





**PROCESS AND ANALYZE**

1. A spoon has both a convex side and a concave side. If you are eating soup, is the side of the spoon holding the soup convex or concave? Explain how you know.
2. Do convex and concave mirrors obey the Law of Reflection? Explain.
3. **Converging** means **coming together** and *diverging* means s**eparating**. Use these 2 terms to describe the light reflecting from the convex and concave mirrors.
4. Do the light rays reflecting off the convex mirror ever cross? Explain.
5. When bringing the mirrors closer to your eye, why do you think the convcave mirror caused your image to disappear and reapper flipped? Draw a diagram to support your answer.
6. Mirrors are placed behind flashlights and headlights in cars to focus the reflected the light to a bright beam ahead of the car. Explain which mirror would be used for this purpose. Justify your answer.
7. Think of your observations at the beginning and what images you saw in each mirror. Give at least one USE for each of the following mirrors and explain why.

a) plane mirrors:

b) concave mirrors:

c) convex mirrors:



