Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_\_

**Station 4: Convex and Concave Mirrors and Lenses**

**Focus Question:** How does light behave when it hits a convex/concave lens vs. convex/concave mirror.

**Task:** You are going to observe and gather data from two sources to compare the behavior of light when it hits a convex/concave lens vs. a convex/concave mirror. Using these two sources, you are going to construct a model illustrating and explaining your response to the focus question.

# Part 1: Watch the following Video: Concave Mirror - Why is your reflection upside down on a spoon? | Smart Learning for All. *This video is about mirrors not lenses.*

<https://www.youtube.com/watch?v=N6n0FAZ_6N8&t=47s>

2. Gather evidence to help you respond to the focus questions: How does light behave when it hits a convex/concave lens vs. convex/concave mirror?

-Remember you are eventually going to construct a model. Make sure you add quick sketches/diagrams along with your evidence

**Part 2: Online Exploration**

1. Get your assigned Chromebook, and go to <http://ca.pbslearningmedia.org/asset/lsps07_int_refractdemo/> (also on my blog)

2. Play the convex lens video and then the concave lens video. While you are watching the video, gather and record evidence on your data table.

|  |  |
| --- | --- |
| Convex Mirror Evidence | Sketch |
| Concave Mirror Evidence | Sketch |
| Convex Lens Evidence | Sketch |
| Concave Lens Evidence | sketch |

**Part 3: Constructing a Model**

1. Using the evidence you have gathered, construct a model responding to the focus question: How does light behave when it hits a convex/concave lens vs. a convex/concave mirror?

- Your model should include a clear and detailed labels, explanations, and diagrams that respond to the focus question