Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- To apply the Law of Refraction to thin, spherical lenses.
- To use ray diagrams to conceptually understand how light refracts when it interacts with concave and convex lenses.
- To calculate the location and height of the image formed when both concave and convex lenses are used.

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: “If I was going to explain this to someone else, what would I say?”
Answer the following.

1. Define a lens in your own words.

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2. If a lens converges light rays, do the rays come together or separate after passing through the lens?

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____________________________________________________________________________________

3. What kind of lenses converge light rays? Draw a diagram of this lens in the space below.

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4. What kind of lenses diverge light rays? Draw a diagram of this lens in the space below.

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Questions to Consider

5. On the diagram below, label the center of curvature, principal axis, and focal point.

   ![Diagram of a lens with labeled parts]

6. What kind of image do convex lenses create?

   [Blank for answer]

7. Complete the ray diagram below for the example used in the video segment.

   ![Ray diagram for convex lens]

8. How do virtual images differ from real images?

   [Blank for answer]

9. What kind of image do concave lenses create?

   [Blank for answer]

10. How does the size of the image formed by concave lenses compare to the size of the object?

    [Blank for answer]