

Immunologist Career Maker Activity

From the book *Careers in STEM A to Z*

<https://youngstems.com/products/>

Immunologist poster: <https://youngstems.com/photogallery/gallery12/>

Microscope Lenses and Coronavirus Slides

Materials for Pretend Microscope Lenses:

- 1-2 empty paper towel rolls OR 4 toilet paper rolls
- Scissors
- Tape

Directions:

You will be re-rolling the existing roll to make different size lenses.

1. Cut the paper towel rolls into 4 equal sizes OR use the 4 toilet paper rolls.
2. Pull or cut 3 of the rolls apart at the spiral seams.
3. Decide which end will be the bottom of the lens and which will remain more open as the eye hole.

(Younger children may need help with the remaining steps.)

4. Hold the end of the roll, and begin rewrapping in a spiraling fashion until the lens hole and eye holes are the size you want, leaving the eye hole larger. You may have to try this several times to obtain the size lens that you desire. Change the diameter of each lens hole by wrapping more tightly or loosely so there is a varying view through each.
5. On the outside of the lens, tape down the end of the roll to hold it together.
6. Use the lenses by looking at the same item or selected area using the different lenses. Observe how the size of the hole opens or narrows the view.



Cardboard Microscope: <https://www.youtube.com/watch?v=83mrft-la70>

Materials for Pretend Microscope Slides:

- 1 sheet of thin cardboard or stiff tagboard, about 8.5 x 11 inches
- Scissors
- Crayons, colored pencils, or markers

Directions:

1. Cut the sheet of thin cardboard or tagboard into 2 x 4 inch size rectangles.
2. Look up what Coronavirus looks like: <https://www.npr.org/2020/02/13/805837103/images-what-new-coronavirus-looks-like-under-the-microscope>
3. Using crayons, colored pencils, or markers to draw the images of the Coronavirus.

Immunologist in-training: <https://www.nature.com/articles/d41586-019-02334-9>

