Imagine that you have a small aperture shaped like a small arrow. Now suppose that you take a very small light bulb and illuminate this aperture while looking at the light that passes through the aperture on a white screen (a piece of paper). BTW, you are allowed to try this as a real experiment to answer these questions.

A) Keeping the distance between the screen and the aperture approximately 30 cm, as you increase the distance between the aperture and the bulb, what happens to the image you see? Explain why this happens.

B) Keeping the distance between the bulb and the aperture constant, increase the distance from the aperture to the screen. What happens now? Explain.

C) Replacing the small bulb with a larger frosted bulb, repeat the experiments.

D) Design this experiment following the procedures that we have discussed in class.