

## **Special project 1 (due Sept. 19)**

### **Project title: Lens making**

**Main objectives:** to make a lens, measure (or estimate) its focal length, and to make an image using this lens. Bring you lens to class, if possible, but if not – provide good pictures/video to show it.

You need to make a lens using available materials. There is no restrictions on what you can or cannot use, except you cannot use a ready-made lens or anything that can serve as a lens without any extra effort. The two challenges you are likely to encounter is the transparency of your material and the quality of the surface.

Estimate the focal length of your lens. It is up to you to decide what method works best. In case you cannot bring the lens in, provide accurate description of your measurement procedure.

Use this lens to take an image of some object. It is possible that your lens is not going to be perfect – think about how to artistically use its imperfections!