Observing a Shadow
Fill out the table and answer the following questions:

The starting brightness of the shadow and the screen are both 100 to begin with. Choose a number, either higher or lower, that best represents the brightness of each element (shadow and screen) for each different number of papers over the projector:

Number of Papers	Brightness of Screen	Brightness of Shadow	Observational Notes
9	100	100	
8			
7			
6			
5			
4			
3			
2			
1			
0			

1. When is the first time that you can distinguish for certain the existence of a shadow that is of a different brightness than the rest of the screen?

2. Describe your observation of what happens to the brightness of the screen from 9 covering papers to no covering papers.

3. Describe your observation of what happens to the brightness of the shadow from 9 covering papers to no covering papers.

4. Give at least one well-thought out *reason* for your statements in #2 and #3.

Your main lesson book write-up should include:

1. a description of the experiment
    a. including the procedure,
    b. your personal experience, and
    c. your data table
2. a drawing of some representative stages of the sequence *as you first observed them¸* with a title and description, then also
3. a drawing of some representative stages of the sequence *as they "objectively" existed* (as we discovered through our discussions) also with a title and description
4. Include major points and topics from class discussion such as
    a. whether you changed your opinion on what you observed at any point, and why
    b. how others viewed the phenomenon
    c. how we eventually tried to 'figure out' what was happening and the results
    d. Also include your best description of the actual phenomenon, for example by discussing:
        i. What is "really" happening?
        ii. What kinds of ways can we approach the phenomenon?
        iii. The *meaning* of the experiment for your life as a whole – what does it mean about the relationship between your *perception* of things and your *thoughts about* things? Do they necessarily coincide?