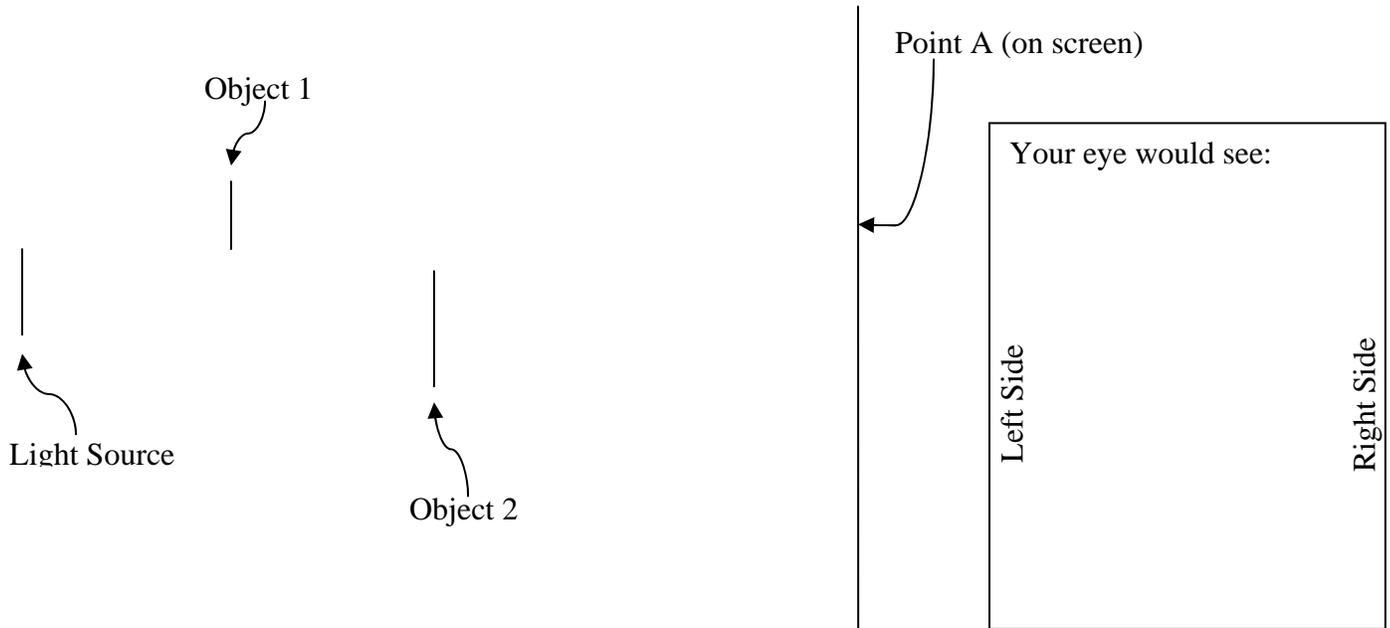


5. (3) Draw what your eye would see when looking from Point A towards the two objects and the light source on the following bird's-eye view diagram. Make sure to include in your drawing everything that you can see. Assume the objects and the light source are squares. (Hint: Use a ruler and be as accurate as you can!!!)

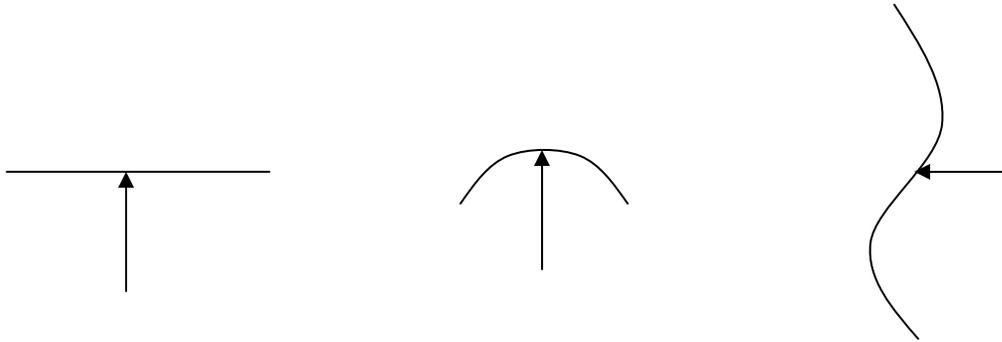


6. (3) A butterfly at eye level is 20 cm in front of a plane mirror. You are directly **behind** the butterfly, 50 cm from the mirror. What is the distance between your eye and the image of the butterfly in the mirror? Assume the mirror is parallel to you, as if hung on a wall. (Hint: make a drawing!!)

7. (1) If you see the reflected image of someone's eyes in a mirror, then it must be the case that the other person:
- cannot see your eyes
 - can see your eyes
 - might be able to see your eyes, depending upon their perspective
 - might be able to see your eyes, depending upon the angle of the mirror
8. (1) Name something that has the quality of being self-dark: _____.
9. (3) Discuss the "cow" drawing from the perspective of the relationship between your observations (percepts) and your thinking (concepts). What can be said about knowledge from this experiment?
10. (1) Light always travels at a constant speed. No matter what. TRUE / FALSE

11. (3) List at least three different ways we can visually tell the distance to an object. Each method gives different information, and they do not equally contribute to our sense of distance. Make sure that you include the *most important, primary* way as one of the three.

12. (2) Draw a normal to the line (or curve) at the point indicated by each of the arrows below:



13. (3) Extra Credit: Describe the connection between electromagnetism and light:

Once you are done with the test, turn it in and take the “Fishtank Observation” sheet. Go to a fishtank and observe according to the instructions on the sheet, writing down your observations as you go.
Do this *quietly* until everyone is done with the test.