**Worksheet 8 Investigating lenses**

1. Position the bulb, lens, and screen so that an image of the bulb is formed on the screen. Draw a diagram of your set up in the space below.

2. How do you make the image as small as possible? Explain what you need to change in your set up.

3. How does the orientation of the image of the bulb compare to the orientation of the actual bulb? How can you tell?

4. Remove the screen and, with your eye close to the lens, position the bulb so that you see a magnified image of the bulb. How did you achieve this? How does your answer compare with your answer to Question 2?

5. If you place the screen where your eye was located, do you see a magnified image of the bulb on the screen?

6. What is the smallest distance between the bulb and the lens that forms an image of the bulb? How does the size of the image compare to the size of the actual bulb?