**Worksheet 1.2 How does light travel?**

A light bulb is set in the middle of a classroom and turned on.

1. In the diagram below, the rectangle represents the walls of the room and the circle represents the position of the bulb. Where in the room would it be possible to detect light from the bulb? Mark this/these position(s) in the diagram.

Bulb

Walls

2. Consider a person standing in the corner of the classroom.

Bulb

Walls

 Does light from the bulb travel as far as this person? How do you know?

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 On the diagram, draw in the path that light takes from the bulb to the person.

 How does this path change if the person closes their eyes?

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3. Now consider that four people are facing the bulb.

Bulb

Walls

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 Draw in the path that light takes from the bulb to each person.

4. Suppose the four people above faced the wall instead. Would they still see light from the bulb? Explain.

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5. A box with a small hole in the side is placed over the bulb.

Walls

 Draw in the diagram where you would need to stand in order to see light from the bulb. Is there only one position? Explain.

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