

Name _____

Finding Out About Heat (Light) that is Spread Out

1. Write your number of squares you counted on the lines of below that you counted.

At 90-Degrees, _____ squares have light on them.

At 75-Degrees, _____ squares have light on them.

At 60 Degrees, _____ squares have light on them.

At 45 Degrees, _____ squares have light on them.

2. What does each number represent?

3. As the number of each angle gets larger what do you think is happening to the heat on the paper as it is spread out more?

4. With your calculator divide each number into 100%. (100% is the most amount of heat that the flashlight can give out.) Write your answers on the lines below.

90-Degrees: _____ amount of heat each square gets.

75 Degrees: _____ amount of heat each square gets.

60 Degrees: _____ amount of heat each square gets.

45 Degrees: _____ amount of heat each square gets.

5. What does each number you wrote down mean?

6. Each number is different. What does this mean?

7. What is going to happen to the heat of the light on the paper as the angle changes even more?

8. How is this simulation like the angle of the light changing as it is shining on the earth?
