

Data Collection Form for Poking Fun at Math

Record your observations as you poke holes in your foil and turn on different numbers of bulbs:

1. Start with one hole and one bulb. How many lights (images) do you see on the wax-paper screen?
2. Turn on another bulb and record what you see. Then turn on the third bulb and record what you see.
3. Poke a second hole. Start over with only one bulb, then turn on a second bulb, then all three bulbs. Record the number of images you see each time.
4. Continue with this pattern of adding a new hole and turning on one light at a time until you have enough data to see a pattern.

# holes in foil	# bulbs turned on	# lights visible on wax paper
1	1	

Can you come up with a formula that predicts the number of images based on the number of holes and the number of bulbs that are turned on?