



Airport Screener

STEM Sims

Lesson 2: Shift Length

Many tasks that require intense attention to details present special challenges to most workers. Airport security officers who screen luggage must focus all of their attention to make sure that no illegal items pass their security checkpoint. An important question security management officials must ask is how a security officer's effectiveness is affected by the amount of time that he or she spends performing a challenging task, such as screening luggage. It's up to you to provide the answers. Are you ready for this challenge?

Doing the Science

1. Start the Airport Screener Simulation by clicking on the "Sim" tab.
2. Read the instructions provided.
3. Click once on the timer to set the shift time to 3 minutes.
4. Click on the right green arrow *five* times to start the conveyor belt. Do *not* speed up or slow down the conveyor belt during this or any other test.
5. Do *not* pause or reverse the conveyor belt during this or any other test.
6. Do *not* use the "Magnify" button during this or any other test.
7. If you identify a dangerous object in a suitcase, click on the "Alert" button.
8. When time runs out, a report presents how well you did. Record the number of prohibited items you *missed* in Table 1.
9. Click once on the timer to set the shift time to 6 minutes. Repeat steps 4 – 8.
10. Click once on the timer to set the shift time to 9 minutes. Repeat steps 4 – 8.
11. Enter data from four other students in Table 1. Find and record the average number of misses for each shift time in Table 1.

Table 1.

Student	Number of Prohibited Items Missed During Screening		
	3-minute Shift	6-minute Shift	9-minute Shift
You			
Average			

Do You Understand?

1. What happened to screeners' ability to detect prohibited items as the shift time increased? Provide a possible reason for this trend.
2. What implications do your answers to question #1 have for security management with respect to their luggage screening staffing decisions?