## Learning Target: Generate scientific questions based on observations, labs, and research

## Directions: Read the scenario below to decide what scientific question was being tested.

Chris wanted to take Jackson to a Tigers baseball game, but he wanted to make sure Jackson would be excited and "into" the game. He purchased tickets to four night games against the same team. Twice the seats were located in the lower bowl, $1^{\text {st }}$ row in. Twice the seats were located in the upper bowl, $25^{\text {th }}$ row back. Throughout each of the four games, Chris tallied the amount of Jackson's facial expressions and responses that were happy/excited. See the data table below for results.

Number of Positive Responses Given During a Tigers Game

| Location | Game 1 or 2 | Game 3 or 4 |
| :--- | :--- | :--- |
| Row 1 lower bowl | 57 | 68 |
| Row 25 upper bowl | 39 | 45 |

Question that is being tested $\qquad$

This experiment is faulty because there is more than one variable (factor) that has changed. Think about the scenario...in addition to the location, what other factors changed and could therefore affect your outcome?

1. $\qquad$
$\qquad$
2. $\qquad$
$\qquad$

Directions: After reading the data table below, generate a question that the scientist could be trying to answer.
TRAVEL TIME TO MRS. THELEN'S FROM VARIOUS LOCATIONS

| Location | Round 1 | Round 2 | Round 3 | Round 4 |
| :--- | :--- | :--- | :--- | :--- |
| gym | $2 \min 31 \mathrm{sec}$ | $2 \min 23 \mathrm{sec}$ | $2 \min 39 \mathrm{sec}$ | 2 min 28 sec |
| cafeteria | $2 \min 15 \mathrm{sec}$ | $2 \min 24 \mathrm{sec}$ | $2 \min 30 \mathrm{sec}$ | 2 min 28 sec |
| lockers | $3 \min 43 \mathrm{sec}$ | $3 \min 30 \mathrm{sec}$ | 3 min 18 sec | 3 min 19 sec |

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