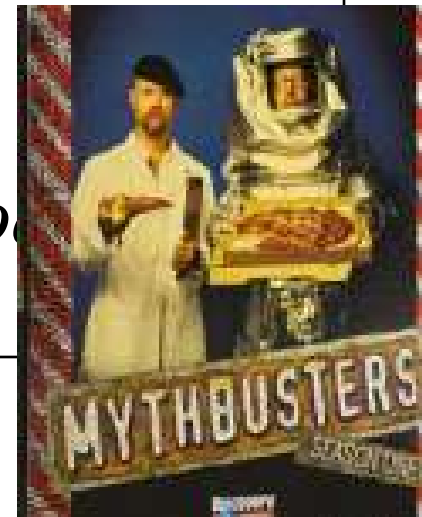


The Five Second Rule



- *Reviewing the Scientific Method*
- *With Mythbusters*



- What is the question (*problem*) that the Mythbusters are trying to test?
-

- What is the effect of time on food contamination?
 - IF food has been on the floor for five seconds or less, THEN it will be uncontaminated.
 - This, like all the Mythbusters' Myths, is the hypothesis they are attempting to prove or disprove.



- What are the *procedures* for the first bacteria test?

- Place bacteria plates in various places around the lab and left them there for 5 seconds.
- Incubate (keep warm) the plates at 98.6°.
- Wait 24 hours.
- Measure bacteria growth.



- What were the results for the bacterial growth on the toilet seat? Explain.
-

There was very little bacteria on the toilet seat.

Possible e

■ It is clea

■ They are

■ The but
because



- What were the *variables* for the experiment?
-

- Independent Variables (IV):
 - Time (2 seconds and 6 seconds)



- Dependent Variable (IV):
 - Amount of bacteria gathered on food surface

- Controlled Variables (CV):
 - Evenly contaminated surface
 - Size of floor samples
 - Size of food samples
 - Amount of bacteria already on the food



- Why is it necessary to conduct *multiple trials* in an experiment?
-

THIS QUESTION
The more trials you conduct, the more reliable your results will be!
IS PROBABLY
Multiple trials help to identify data that results from not following the procedures correctly.
ON THE
TEST!!!

6. During the last test, what was the only variable tested? Why was this the best?

- Time
- Time was the independent variable in the hypothesis.



7. In the end, what were the final results? Explain.

