Identifying Variables Practice
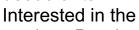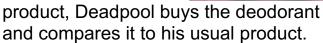
Scenario 1

A new deodorant claims to prevent sweating for 50% longer than other deodorants. Interested in the product, Deadpool buys the deodorant and compares it to his usual product.
- On day 1, he uses his original deodorant.
- On day 2, he tries the new deodorant. His results are below:

	Number of Minutes Before Sweating Occurred
Day 1	30 minutes
Day 2	45 minutes

Identify the following:
1. Independent Variable:

2. Dependent Variable:

3. What should Deadpool's conclusion be? Use evidence from the data (numbers) to support your answer.

4. How could this experiment be improved?

Scenario 2

Joyce and Jonathan keep finding a strange green slime on their front window. Chief Hopper tells them that Windex might help with the problem.

Joyce decides to spray half the window with Windex and sprays the other half with water. After 3 days, there is no change of the green slime on the window.

Identify the:
1. Independent Variable:

2. Dependent Variable:

3. Control:

4. What is a hypothesis Joyce can write about her observation?

Scenario 3

Rick believes that by exposing different Morty's to radiation they will become extra smart. He places 10 Mortys into a radiation chamber for 10 seconds. He places another 10 Mortys in the radiation chamber for 5 seconds. Lastly, he has 10 Morty's in the radiation chamber for 0 seconds. He counted how many Mortys could solve a calculus problem. Below is his data:

Time in Radiation Chamber	Number of Mortys that Solved the Calculus Problem
10 Seconds	1
5 Seconds	0
0 Seconds	0

Identify the:
1. Independent Variable:

2. Dependent Variable:

3. What should Rick's conclusion be? Use evidence from the data (numbers) to support your answer.

4. How could Rick improve his experiment?

Scenario 4

Cheryl is looking for ways to improve the long-wear of her lipstick. Her task is to answer the question, "Does moisturizing lips before putting on lipstick affect the long-wear (time) of the lipstick?" Her friends are willing to volunteer for the

Identify the:
1. Independent Variable:

2. Dependent Variable:

3. Write a possible hypothesis Cheryl could write for this experiment. (If then format)

experiment.

Scenario 5

 Owen Grady thinks that special meat will increase the intelligence of raptors.

He creates three groups of 50 raptors each and assigns them to find hidden objects.

- Group 1 eats 100 g of the special meat.
- Group 2 eats 50 g of the special meat.
- Group 3 is not given the special meat.

After a day, Owen counts how many objects each group found. His data is below:

	Number of Objects Found
Group 1	1,000
Group 2	1,500
Group 3	4,000

Identify the:
1. Independent Variable:

2. Dependent Variable:

3. Control:

4. What should Owen's conclusion be? Use evidence from the data (numbers) to support your answer.