

Part A: Chomper Challenge.

For this experiment, you will conduct four trials to determine the number of chomps you can do in 15 seconds. A chomp is defined as a "big chew", or the kind that usually causes you to get caught with gum.

Use a timer to determine the number of chomps you can do in 15 seconds. Record your data in the chart. Repeat the same process for trials 2-4.

Trial	Chomps	Time	Speed
1		15 s	
2			
3			
4			

$$\text{Speed} = \text{Number of Chomps} \div \text{Time.}$$

~ Round speeds to the nearest tenth~

1. What is your average speed? Round answers to the tenth.

_____ chomps/second

2. Based on your average chomping speed, how many chomps could you do in one minute, 5 minutes, or one hour? Show your work.

1 min = _____ chomps _____

5 min = _____ chomps _____

1 hour = _____ chomps _____

3. Did your partner have a faster or slower "chomping" rate? Include data to support your answer please. _____

Part B: *Speedy Chomps* Use a timer to determine the number of chomps you can do in 1 minute. As the time reaches each point, record the number of chomps you have completed. Do not stop the timer as you record your data.

Time	Chomps
20 sec	
40 sec	
60 sec	

1. Calculate your chomping speed at each point (20 sec, 40 sec, and 60 sec) using the data from your experiment. Round all answers to the nearest tenth.

Speed at 20 sec = _____ chomps ÷ 20 sec = _____ chomps/sec

Speed at 40 sec = _____ chomps ÷ 40 sec = _____ chomps/sec

Speed at 60 sec = _____ chomps ÷ 60 sec = _____ chomps/sec

2. Did you maintain a constant rate? Explain. _____

3. Was your rate at 60 seconds faster or slower than your calculated rate for 1 minute on the front side? Please include data to support your answer.
