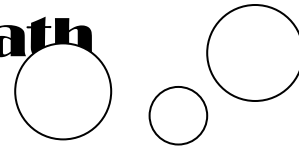


# A Bubble Full of Math



Names \_\_\_\_\_ and \_\_\_\_\_

MA.B.3.3.1- The student solves real-world and mathematical problems involving estimates of measurements including length, time, weight/mass, temperature, money, perimeter, area, and volume, in either customary or metric units.

1. One student blows a bubble, while the other student "catches" it on the black construction paper. (The closer you are to each other, the easier the process.)
2. With your pencil, QUICKLY outline the print the circle makes after it pops on the paper. (It will not be a very dark print, so you must outline immediately before the heat makes it disappear.)
3. Estimate the length of the string needed to trace that circle. Record your estimation on the chart below.
4. Trace the outline with your string.
5. Use the ruler to measure the length (in centimeters) of string it took to trace the circle. Record the length on the chart below.
6. Repeat steps 1-5 four times.

Circle	Estimated Length (cm)	Actual Length (cm)	Difference (cm)
#1			
#2			
#3			
#4			
#5			

7. Find the difference between the estimated length and actual length for each circle. Record these numbers on the chart.

QUESTIONS (You may answer these on the bottom of the opposite side.)

- A. Compare your estimations to the actual lengths.
- B. Did you see an improvement in the accuracy of your estimations?
- C. If you answered yes to Question B, what do you think caused this improvement?

## Rubric for A Bubble Full of Math

Criteria	Commendable	Acceptable	See Teacher
<b>Cooperative Work</b>	Works cooperatively with partner without problems	Works with partner with few problems	Refuses to cooperate with partner
<b>Estimations</b>	Makes an estimate for all 5 circles	Makes an estimate for 4 circles	Makes an estimate for 1-3 circles
<b>Calculations</b>	Correctly calculates the difference for all 5 circles	Correctly calculates the difference for 4 circles	Correctly calculates the difference for 1-3 circles <u>or</u> incorrectly calculates the difference for all 5 circles
<b>Comparisons</b>	Clearly compares the estimated and actual lengths	Compares the estimated and actual lengths with some degree of ambiguity	Does not makes a comparison