Name:_____

Fill out this table and answer the questions using the "Area & Circumference" applet.

1)

Circle	Radius (in.)	Diameter (in.)	Circumference (in.)	Area (in.)
A		4		
B		6		
C		8		
D		10		
E		12		
F		14		

2) **Look at circles A and C on the table above. The diameter of circle C is twice as long as the diameter of circle A. How much larger is the circumference of circle C than the circumference of circle A? Show any calculations you make.**

If you double the diameter of another circle, does the circumference change in the same way? Use the applet to answer this question and be sure to give a clear example.

3) **Look at circles A and C again. How much larger is the area of circle C than the area of circle A? Show any calculations you make.**

If you double the diameter of another circle, does the area change in the same way? Use the applet to answer this question and be sure to give a clear example.

4) **Let's take the example of a 3-inch-diameter pizza covered entirely with cheese. What is the area that will be covered by cheese?**
What is the length of the dough around the pizza (circumference)?
Use the "Area & Circumference" applet to help you answer this question.

5) **If you <u>double</u> the pizza's diameter, it becomes a 6-inch pizza. Compared to the original pizza in Question 4, how many times bigger would be the area covered by cheese in this new pizza? How many times longer would the dough (circumference) be around this new pizza?**
Use the "Area & Circumference" applet to help you answer this question.

6) **What happens if you <u>triple</u> the diameter of the original pizza? Compared to the original pizza in Question 4, how many times bigger would be the area covered by cheese in this new pizza? How many times longer would the dough (circumference) be of this new pizza?**