

_____’s Efficacy Notebook - Math



3/18 Task Statement:	2
3/18 Rubric :	3
3/19 Finding the circumference of a circle - learning activity:	3
3/19 Math Journal - Defining Pi:	3

3/18 Task Statement:

How Do You Celebrate Pi?

It seems like there is a holiday for everything... even pi! In the United States, we celebrate Pi Day on March 14, which represents the first three digits of pi in decimal form (3.14). However, in many European, African, and Asian countries, they recognize July 22 as “Pi Approximation Day” (22/7), which is the fractional approximation of pi, since they write their dates as the day and then the month. Either way, the day is recognized as a celebration of this universal symbol that has been around since ancient civilization. How much do you know about pi?

Pi is a **ubiquitous** symbol in the world of mathematics. Originally, it was the symbol used to represent the relationship between the diameter and circumference in a circle. The Greek mathematician, Archimedes, known as the father of mathematics, was originally credited with the algorithm to calculate pi. Though pi is synonymous with circles, it is found and used in disciplines from computer science to physics. Why is pi utilized across various maths and sciences?

Let's discover why and celebrate! **You will create a decorative display to be showcased at school or in a community area in celebration of the ubiquitous symbol, pi.** What is the strength of the circle? Why is there power in this simple yet complex mathematical symbol? No matter if you are in North America, Australia, or Africa, let's generate some mathematical buzz around pi!

3/18 Rubric :

	Novice	Apprentice	<i>Practitioner</i>	Expert
Math Journal – Defining Pi	includes: <ul style="list-style-type: none"> <input type="checkbox"/> description of pi <input type="checkbox"/> definition of circumference, diameter, radius, and area <input type="checkbox"/> use of pi in formulas for circumference and area 	includes: <ul style="list-style-type: none"> <input type="checkbox"/> description of pi <input type="checkbox"/> explanation of how pi is related to circumference and diameter of circles <input type="checkbox"/> explanation of the relationship between circumference and area of circles <input type="checkbox"/> most geometric formulas for which pi is used 	includes: <ul style="list-style-type: none"> <input type="checkbox"/> description of pi and its historical background <input type="checkbox"/> explanation of how pi is derived from circumference and diameter of a circle <input type="checkbox"/> explanation of the relationship between circumference and area of circles <input type="checkbox"/> the derivative relationship between circumference and area <input type="checkbox"/> all geometric formulas in which pi is used; explanation of each formula 	all of <i>Practitioner</i> plus: an explanation of the history of the circle and how its use and pi evolved over time

(Sample from MyQPortal.com)

3/19 Finding the circumference of a circle - learning activity:

I used the [how-to sheet](#) in order to work on the problems from the textbook. This is related to finding the perimeter of shapes that we did in 3rd and 4th grade but circles give it a special name. I need to remember to look to see if the problem gives me the radius or the diameter because though the formula is similar they are different and I don't want to make a mistake. I still need to learn about the area in order to compare it to my display about pi.

3/19 Math Journal - Defining Pi:

1st entry