## Unit Circle Art Project

## Create an artistic representation of the Unit Circle:

The goal of this project is to help you become very familiar with the unit circle, its angles and values. You are to use any method you choose to design a unit circle. It must include the degree, radians, sine and cosine values (ordered pairs) and tangent values for $0^{\circ}, 30^{\circ}$, $45^{\circ}, 60^{\circ}$ and $90^{\circ}$ and their corresponding angles and points in the remaining three quadrants. You may draw, color, paint, build, use construction paper, cut, paste, write, stencil, etc ... In other words, use your creative ability. Projects that are merely a hand drawn recreation of a circle or a prints-off of a unit circle with the appropriate values will not be accepted. Creativity is encouraged. Use your imagination! The more creative the project the higher the grade (See rubric). Remember to measure your unit circle with the correct degree measurements.

Use your choice of medium (School appropriate)
Your display should include all the angles in degrees and radians. Please be sure to measure the angles with a protractor to ensure accuracy of your scale representation.

You must also include sine, cosine and tangent values for EACH angle.
Be creative and have fun!
The project will be due by the beginning of your class period on $\qquad$ .

The project will count as a unit test grade for $3^{\text {rd }}$ Quarter.

## Table of trig values:

Please fill the following table:

| Degree | Radian | Sin | Cos | Tan | Cot | Csc | Sec |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $0^{\circ}$ |  |  |  |  |  |  |  |
| $30^{\circ}$ |  |  |  |  |  |  |  |
| $45^{\circ}$ |  |  |  |  |  |  |  |
| $60^{\circ}$ |  |  |  |  |  |  |  |
| $90^{\circ}$ |  |  |  |  |  |  |  |

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Rubric

|  | Points Earned | Points Possible |
| :--- | :--- | :--- |
| Trig Values table |  | 35 |
| Accuracy of unit <br> circle shape |  | 15 |
| Accuracy of details <br> of unit circle |  | 30 |
| Neatness/Creativity |  | 100 |
| Total Points: |  | 20 |

