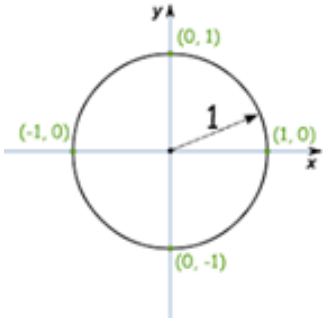
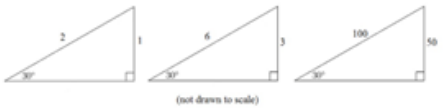
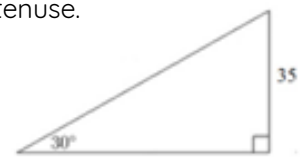
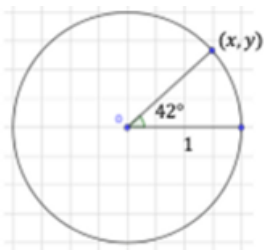
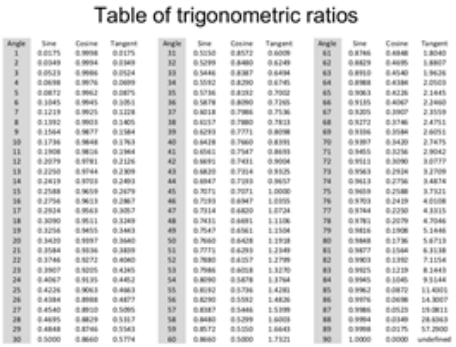
Curriculum Progression	Example	Resource
A dot moving around a circle.	 "When is the dot highest? Once this point is agreed, I state that the height of the dot at this point is 1. I ask When is the dot lowest? Once this is agreed I state that the height at this point is 1. I ask When is the height of the dot zero?"	Take a read of **Dave Hewitt's description** on how to introduce this.
Introduce the unit circle during a geometry unit looking at circumference and area of circles. Also, when labelling of parts of a circle to include the unit circle as a special case. (no reference to Sin, Cos or Tan)	 What is the area of this circle?	A **visual demonstration** of the area of a circle.
Emphasizing similarity of triangles with a named angle (no reference to Sine, Cosine or Tan).	 Then show them something like this one and see if they can find the hypotenuse. 	An extension with different angles is described in this **blog by Jo Morgan**.
Using Sine and Cosine to find coordinates on the unit circle.	 Find these coordinates.	Here is an excellent worksheet designed to build on working with the unit circle with **simple tasks** introducing it.

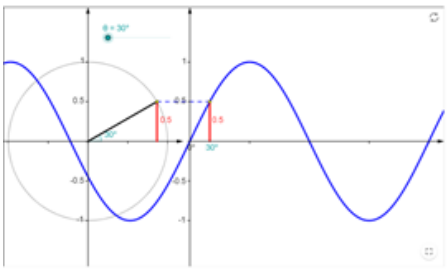
An attempt to develop Pythagoras with a unit circle including some surds for exact values.

Without calculators developing a sense of the ratios using a table.



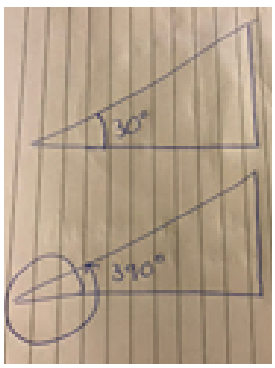
[Dan Walker has an excellent set of PowerPoint slides](#) that also contain this table for use for the students.

Sine, Cosine, Tangent functions and their graphs related to unit circle along with exact values.



Try this [interactive app](#) to demonstrate this.

By using the anticlockwise rotation on a unit circle students can also appreciate the cyclic nature of trigonometry.



Find tan(30).
Find tan(390).

Why is this the same? What does this sketch tell you?

Chris McGrane's [blog](#) contains some similar thoughts on introducing trigonometry.