

**FREE-STANDING MATHEMATICS UNITS****Foundation Level: Making Sense of Data**

Student name	Student signature
Date due in	Date submitted

**Assignment Circles**

Your task is to get as accurate a value for  $\pi$  as you can.

Measure as many circular objects as you can.

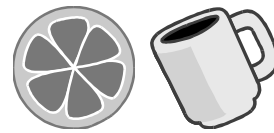
Draw up a table of results

By hand, plot a line graph.

Draw a straight line of best fit through the origin.

Use the gradient of your graph to work out a value for  $\pi$ .

Check your value against the one given by your calculator.



**Explain what you have found out from the graph.**

**You must:**

- select the data you need
- present the data in a table
- choose the graph axes and ensure that they are scaled correctly
- plot the points accurately
- explain any intercepts with the graph axes
- explain the gradient
- explain the general shape of the graph.

Mark guidelines are given below. The maximum mark for each theme is 17.

To achieve:	5 marks	10 marks	15 marks
<b>Structuring &amp; presenting your work</b>	Acted on advice to complete the task	Worked independently	+ Work structured logically
<b>Using appropriate mathematics &amp; working accurately</b>	No major errors	+ Evidence of checking your work	+ Appropriate, efficient & concise working
<b>Interpreting mathematics</b>	Understands what solution means in terms of the real situation	+ Describe in words the main features of the situation	+ Summarise and draw appropriate conclusions.
Comments			
Signature of lecturer			Date

