# DATA LEVEL D

### Constructing a Pie Chart[75]

For this activity, pupils can be used to create a human pie chart.

1. Provide pupils with a menu of different but limited food choices.
2. Pupils group together based on their food choice.
3. Pupils move into a large circle.
4. Elicit suggestions from pupils as to how to estimate the angles to represent their choices.
5. The end points of four long strips of paper or string are taped to the centre of the circle. Each strip can be extended to a different point in the circle where a group's food preference has changed.
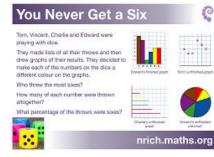
### Further Development

This activity can be extended by placing a cut-out of a rational number wheel (See PDST Place Value Resource, p.99) on the centre of the circle (Appendix, Level D.2). The strips of paper can then be used to show approximate percentages and fractions for each part of the pie chart. On completion of this activity, pupils can compose three statements about the pie chart and record in their Mathematics Journal. Record by drawing and then record more formally using Microsoft Word or Excel

It is important for pupils to represent data on pie charts using a variety of data sets, for example, personal data, sports results etc.  These representations can be developed by moving from the concrete use of pupils and their ribbon strings, to recording using pictures, to the use of ICT.

### You Never Get a Six[76]



This problem will challenge pupils to interpret data carefully and provides an opportunity to for pupils to contrast different ways of representing similar data. Click on the interactive link to access the problem and resources to support its exploration.

**ICT Link**
You never get a six

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[75]Van De Walle, Karp and Bay Williams, (2013, p. 442).
[76] http://nrich.maths.org/2400