## Doughnut Extension Ideas

To open out this investigation you could ask children to explore what happens when other 3D shapes are cut into eighths. For example:



Alternatively, you could suggest getting eight equal pieces from a sheet of A4.
Here are three ideas to start you off:

and of course there are many more.
Perhaps some pupils will come up with something like the middle one and have a good time trying to convince others that they are (or are not) all eighths.

From there, learners could explore different ways of folding an A4 sheet and see what fractions of the whole they get. Can they justify their approximated fraction?

Here are some ideas:
1)



These all came from folding to get triangles:

1) Top left hand corner in so that the top edge lines up with the right edge;
2) Folded lengthways down the middle then the four corners into that middle line;
$3)$ Folding across the diagonal.
