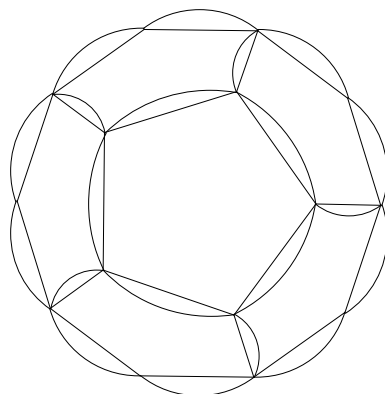


# A GIANT DODECAHEDRON

A dodecahedron is an example of a Platonic solid - one made up of identical regular polygons, in this case pentagons. Follow the instructions below to construct a giant dodecahedron.

1. Construct a large circle by drawing two semi-circles using Geo-Pro's protractor. Mark corners every  $72^\circ$  on a piece of card.
2. Join the corners to form a large pentagon.
3. Now use an arc on Geo-Pro's circular protractor to draw curved tabs on each side of the pentagon.
4. Very carefully cut around the outside of the pentagon's curved tabs. This will be your template for tracing the 12 faces of the model.
5. Trace around your template to produce twelve faces. Score the straight edges of each pentagon with a pen (do this on the side that will be on the inside of the completed model) - this will make the tabs easier to fold later on. Carefully cut out each face.
6. Use a single staple to join each pair of curved tabs on the outside of the model. Ensure that three pentagons meet at each corner to form the model shown below.



The completed model  
(12 joined faces)