AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES



SCHOOLS ENRICHMENT CENTRE (AIMSSEC)

AIMING HIGH

PLATONIC SOLIDS



These are the Platonic Solids.

A Platonic solid is a three dimensional shape where all the faces are the same regular polygon. They can be found in the world around us in the form of crystals, micro-organisms and molecules.

There are only five platonic solids.

We can make models of the platonic solids using paper, sticky tape and string.

There is a separate instruction sheet on the website which explains how this is done.

HELP

The first three platonic solids are quite easy to make. The last two are more challenging. Work together with other learners to try and complete this activity. Use the internet to watch videos which help us to understand how the platonic solids fit together. Here is the link for one of these; https://www.youtube.com/watch?v=RbbaGGmaO6U&feature=youtu.be&list=PLZLVDM_hxHkDC SMUzoDOyQh1B4u9j7aGW

NEXT

Why are there only 5 platonic solids? The faces in the 5 platonic solids are congruent triangles, congruent squares or congruent pentagons. What happens if you try to make a platonic solid from congruent hexagons?