



**Angles  
and  
Polygons**

# ANGLES & POLYGONS

You may use a calculator

## Lesson 1

**GCSE Mathematics**  
**Angles & Polygons**

### 1.1 A Stand-Up Pentagon

Did you know that an ordinary A4 sheet of paper can be folded into a regular pentagon ? No cutting, tearing, or gluing, just.... Intelligence !



It's a surprise because of the “fourness” of a sheet of paper seems at odds with the “fiveness” of a pentagon !

Your mission today is to watch the following video which shows you how to fold a pentagon from a sheet of A4 paper.

Pause and play the video, as you make your own pentagon, following the steps.

Teaching Video: <http://www.NumberWonder.co.uk/v9034/1.mp4>  
(Video from Transum)



A bonus feature, not mentioned in the video is that there are a couple of flaps at the back that you can fold outward so that your pentagon stands upright on your desk. Once made, decorate your pentagon as you wish and take a photograph. Email the photo to me. Good efforts will receive a commendation !

I'll add photographs of the best to the album on the following pages so that the next time this lesson is updated your work will be included. Fame at last !

## 1.2 Pentagon Photograph Gallery



Mr Hansen's Pentagon

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Teachers may obtain detailed worked solutions to the exercises by email from [mhh@shrewsbury.org.uk](mailto:mhh@shrewsbury.org.uk)