

# Teachers' Notes - Engineering in Portsmouth 2006

## The Project and the National Curriculum

### Science

The activities included in the *Engineering in Portsmouth 2006* section of this site have some excellent applications for science teaching at Key Stage 3. A breakdown of what might be possible is given below with reference to the Key Stage 3 QCA Scheme of Work for Science:

#### *Shipbuilding*

Build a pop-pop boat.

Could be used to investigate changes of state and to support units 7G - *Particle Model of Solids, Liquids and Gases*, 8I - *Heating and Cooling*

#### *Aerospace*

Build a model communications satellite and use it to send signals between two positions.

Could be used to support unit 9J - *Gravity and Space*

Full details of the Key Stage 3 Scheme of Work for Science can be found on the DFES website:

[Http://www.standards.dfes.gov.uk/schemes2/secondary\\_science/](http://www.standards.dfes.gov.uk/schemes2/secondary_science/)

### Maths

The Civil Engineering activity focuses on building a clinometer and using it in conjunction with some simple trigonometry to measure the height of the Spinnaker Tower (or anything else you might want to try it with).

This would make an enjoyable activity supporting Ma3 *Shape, Space and Measures*

