



## Level 2 Principal Learning in Engineering (2760-02)

Summer 2015

### Unit 201: The engineered world

Preparation Sheet for the 14 May 2015 examination

#### Instructions

This Preparation Sheet will be given to you on or after 1 April 2015. It gives you the context for **some** of the examination questions.

You may research the context with the guidance of your teacher before the examination date.

This Preparation Sheet may be taken into the examination room. Do **not** annotate or write on this sheet. No other material should be taken into the examination room.

An essential requirement of this unit is that you will form into a team and divide the work fairly between yourselves. Each member will then report their findings back to the rest of the team who will record the relevant information. Team members should make a note of the role(s) they each played and the essential features of how a successful team should function.

**Research context:** Materials used in Transport Infrastructure and Vehicle Systems

**Theme:** Speed boats

The materials used to make a speed boat have a substantial effect upon the performance of the boat.

- 1 Research the developments in technology used to build speed boats over the last 30 years including:
  - the developments in materials used for hulls and superstructures
  - the methods of construction used.
- 2 Consider how past and present developments have an impact upon:
  - industry
  - future products
  - boat users.
- 3 Investigate:
  - types of engineering jobs and typical activities of people involved with the manufacture of speed boats
  - the different ways in which technology is used to increase the performance of different types of boat.

Suggested websites (correct at the time of going to press):

- [http://www.bruceroberarts.com/public/HTML/POWERBOAT\\_DESIGN.htm](http://www.bruceroberarts.com/public/HTML/POWERBOAT_DESIGN.htm)
- <http://marinesurvey.com/yacht/material.htm>
- <http://youboat.net/diy/boatMaterials.aspx>
- <http://www.pelleymarine.com/hull-types.php>