



# Getting Ahead – Pre-course Work

#ThinkBrock

## Engineering Level 2 Technical Diploma

Welcome to Engineering Level 2. In preparation for the start of the course, please complete these tasks and have them with you to hand in during your first week of college in September.

### 1. What type of material is bronze?

- a) A ferrous metal
- b) A non-ferrous metal
- c) A metal alloy
- d) A ceramic material

### 2. Which of the following is a useful characteristic of ceramic materials?

- a) They deform plastically before failure
- b) They can be machined easily
- c) They are brittle
- d) They have excellent resistance to heat

### 3. An engineering application requires a material that is an electrical insulator, is lightweight and formed easily. Which group would be a good choice to look for a suitable material?

- a) Ferrous metals
- b) Non-ferrous metals
- c) Polymers
- d) Ceramics

### 4. Which of these is used to make Plastic?

- a) Wood
- b) Metal
- c) Oil
- d) Sand

### 5. In Which of these is Calcium carbonate not found?

- a) Titanium
- b) Limestone
- c) Eggshell
- d) Coral

### 6. Which element is used, with iron, to make steel?

- a) Bronze
- b) Carbon
- c) Aluminium
- d) Chromium



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**7. What material is made up of cement and water?**

- a) Gypsum
- b) Concrete
- c) Steel
- d) Styrofoam

**8. Which of these elements will eventually become diamond?**

- a) Sulphur
- b) Nitrogen
- c) Carbon
- d) Thallium

**9. Who was the self-taught American chemist who developed vulcanized rubber – Mr.?**

- a) Goodyear
- b) Dunlop
- c) Avon
- d) Michelin

**10. Which of these is not an ingredient used to glaze ceramics**

- a) Ferric oxide
- b) Cobalt
- c) Brass
- d) Iron oxide

**11. The name of which material is translated from the Italian for "baked earth"?**

- a) Clay
- b) China
- c) Pottery
- d) Terracotta

**12. What brand name was given in 1908 for borosilicate glass?**

- a) Boron
- b) Pyrex
- c) Laminate
- d) Pilkington

**13. Quarried on the Isle of Portland, Dorset, what type of rock is Portland stone?**

- a) Limestone
- b) Brick
- c) Blue Circle
- d) Anthracite



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**14. The Leaning Tower of Pisa is constructed of which material?**

- a) Limestone
- b) Wood
- c) Concrete
- d) Marble

## Getting Equipped

You will need the following:

- A ring binder
- Dividers
- Pens, hi-lighters, pencils
- Notebook/notepad
- Calculator