



## Unit 26 – Concrete

### Task 09

Announcer: Listen to a concrete expert who visits your company.

Expert: Ok, now it's time to answer some questions about concrete. Are there any?

Apprentice 1: Is it better to mix concrete on the building site or to have it delivered from a concrete factory?

Expert: Excellent question! If concrete is manufactured in the factory, its quality is normally checked. You know that for larger buildings, exact specifications are given by the structural engineer. It has to be the right concrete for the relevant part of the building. If you mix it on site, you will never know if the quality is adequate. Next question please!

Apprentice 1: How is concrete testing done?

Expert: It's done according to the cement and concrete standards required. The laboratories check the mixture of water, cement, admixtures and aggregates in order to ensure its strength and safety. They also check the workability and setting time plus many other things as well.

Apprentice 2: I have heard that gypsum is sometimes added to cement. Can you tell me why this is done?

Expert: Gypsum is added to control the setting time. As long as the concrete is wet you can shape it. Then it sets through a chemical reaction called hydration. I imagine that you've heard about this before. Are there any more questions?

Apprentice 3: Is there anything I should pay attention to when working with concrete?

Expert: Never forget to pour concrete in layers. These should be between 30 and 50 centimetres deep. When working in temperatures below 5°C, concrete has to be protected from frost. At temperatures above 28°C it has to be protected from drying out too quickly, otherwise in both cases it cracks and becomes unstable.

Apprentice 4: Can you tell us about different types of concrete?

Expert: All right, there is regular concrete, high strength concrete, self-compacting concrete and many types more. I will tell you about this ...