Unit 202: Changing practices over time

# Worksheet 6: 21st-century construction methods (Tutor)

1. Write a definition of ‘prefabrication’ in relation to construction.

Prefabrication is a method of manufacturing components and sections of a building offsite under factory conditions.

1. What impact can offsite construction have on quality standards?

Components can be produced with consistent accuracy to maintain high-quality standards.

1. What is ‘modular construction’?

Modular construction is a method of producing sections of a structure in factory conditions to be transported to site for assembly as a completed building.

1. State **one** way in which modular construction can benefit the environment?

Any one of the following:

* It can use low-energy manufacturing processes.
* It can reduce waste by using efficient manufacturing systems.
* Materials are kept clean in a factory setting for easier recycling.

Any other correct answers can be accepted.

1. Research how modular construction can reduce the time it takes to complete a project. Give **two** examples.

Foundation and infrastructure work on site can happen simultaneously with manufacturing of modules offsite.

Weather-dependent site activities are minimised, reducing delays.

1. How can health and safety be improved using offsite construction methods?

Controlled factory working conditions can be managed more easily to follow safe systems of work.

1. State **one** way that the production of concrete can be made more environmentally friendly.

Any one of the following:

* Use recycled aggregate.
* Use cement-free concrete systems.
* Use less concrete.

Any other correct answers can be accepted.

1. Research ‘cement-free concrete’ and describe what replaces cement.

Ground, granulated blast furnace slag, which is a by-product of iron and steel making, is used as a binder instead of cement.