**Unit 202: Changing practices over time**

# Worksheet 5: 21st century construction methods (Tutor)

**Task 1**: Answer the following questions about methods of 21st-century construction.

1. Sort the following equipment into the correct categories.

drone laser scanner measuring wheel surveying chains VR headset

Answer:

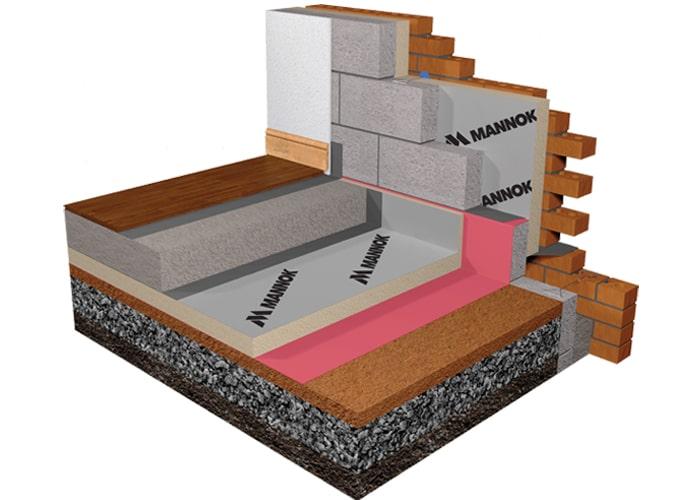
|  |  |
| --- | --- |
| **Traditional** | **Modern** |
| surveying chains | drone |
| measuring wheel | VR headset |
|  | laser scanner |

1. What does BIM stand for?

Answer: building information modelling

1. Label the components of the diagram below using the given words.

Answer:



concrete

concrete

DPM

hardcore

insulation

sand

insulation



DPM





sand



hardcore

1. In your own words, what does the term ‘prefabricated’ mean?

Answer: An item or component that is made before it is required, often offsite.

1. What are the benefits of prefabricated building methods?

Answer:

* + accuracy
  + speed
  + work can continue onsite while other elements are produced offsite
  + less waste
  + guaranteed costs
  + less skilled labour
  + no impact from weather.

*Other answers at tutor’s discretion.*

1. What are the most common reasons for using composite materials?

Answer:

* longevity
* maintenance costs
* appearance
* performance
* strength
* a vast array of design options.

*Other answers at the tutor’s discretion*.

1. How have power tools developed and what impact have they had on the construction industry over the last 20 years?

Answer:

* All power tools can now be corded or cordless – Increased speed and manoeuvrability of workers when using tools.
* Brushless options are now available – Increased lifespan of power tools so reduced likelihood of breaking down.
* Lithium ion batteries – Increased reliability and lifespan of batteries so less time spent charging batteries.
* Safety – Tools are now safer as lower voltage tools are now as powerful as their corded counterparts.

*Other examples at tutor’s discretion.*

1. Name **three** relevant trade bodies associated with your chosen trade.

Answer: Any three from:

* Build UK
* Federation of Master Builders
* FENSA
* Chartered Institute of Builders
* Guild of Master Craftsman
* Institute of Carpenters
* British Woodworking Association
* NHBC

1. In your own words, describe the benefits of joining a trade body.

Answer: Paragraph or list including three or more of the following points:

* networking
* training and education
* recognition
* influence
* insight
* promotion
* best practices/standards
* exchange of ideas.