# Unit 112: Construction operations and civil engineering operations

# Worksheet 31: Concrete – placing the materials (tutor)

1. State the main advantages and disadvantages when receiving and placing concrete using the following methods:

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| Method | Advantages | Disadvantages |
| Wheelbarrow | Cheap  Fewer operatives required  Concrete easily handled | Operations are slow  Often long barrow runs required  More chance of segregation |
| Crane and skip | Concrete can be delivered to all areas of site  Easier when concreting walls and columns  Less chance of spillage | Expensive plant and equipment  Requires an experienced crane driver  Always a danger when other operatives working on site |
| Dumper | Second cheapest form of transport  Does not need an experienced driver  Larger quantities can be transported than by use of wheelbarrow | Wider tracks required for mobility  Not suitable when concreting walls and columns  Risk of segregation due to uneven tracks |
| Ready-mix wagon | Concrete can often be placed directly where required  Large quantities delivered in short space of time  More chance of constant mix from a ready-mix company | Expensive, particularly in small quantities  There must be good vehicle access  Equipment and operatives must be ready at time of delivery |
| Pumping | Very large quantities delivered in a short time  Concrete can be discharged in confined spaces  Concrete can be discharged over long distances | Very expensive  Requires ready-mix wagon and pumping wagon  Must have experienced operator at discharge, due to speedy delivery |