Unit 114: Installing electrotechnical systems and equipment

# Worksheet 5: Know the main principles of standard circuits 2 (tutor)

1. State three reasons why installations should be divided into circuits.

Any three correct answers from 314.1 Examples include:

1. To prevent danger in the event of a fault by ensuring that the fault current is no greater than necessary to operate the protective system.
2. To enable part of an installation to be switched off for maintenance or for testing without affecting the rest of the system.
3. To prevent a fault on one circuit from resulting in the loss of the complete installation.
4. The conductor that joins the installation earthing terminal to the earth electrode or to the earth terminal provided by the electricity supply company is called:

Earthing conductor

1. What is the purpose of the main equipotential bonding conductors?

To ensure in the event of a fault to earth that potential difference between both exposed and extarneous conductive parts does not rise above 50V.

1. An automatically operated electrical switch designed to protect an electrical circuit from damage caused by excess current from an overload or short circuit is called a:

Circuit breaker

1. What is the purpose of a polarity test?

To ensure that all single pole devices (fuses, switches and circuit breakers) are connected in the line conductor only.