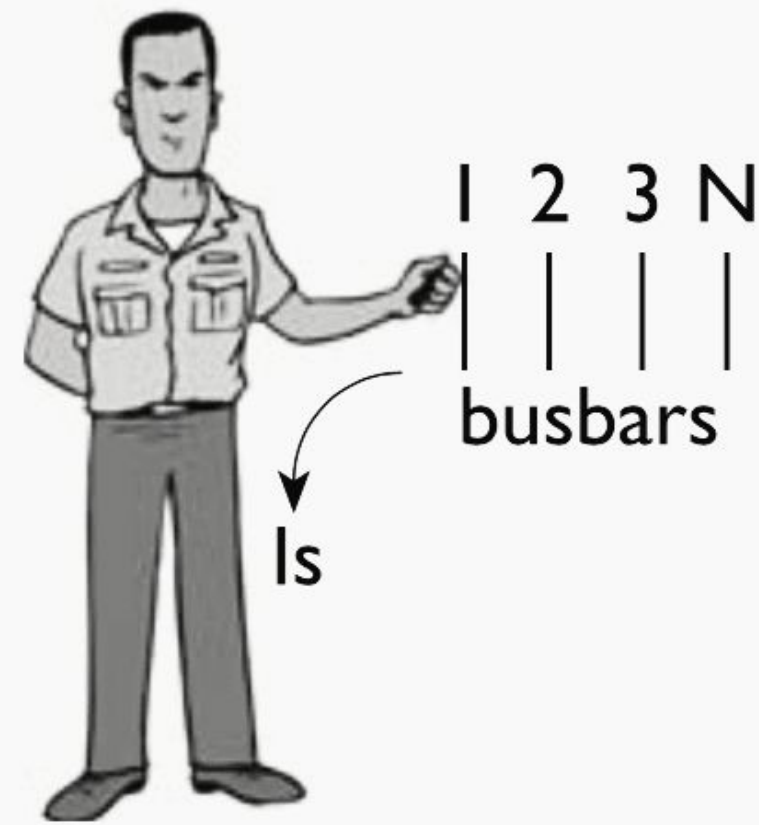


Grounding system

Types of electrical contact

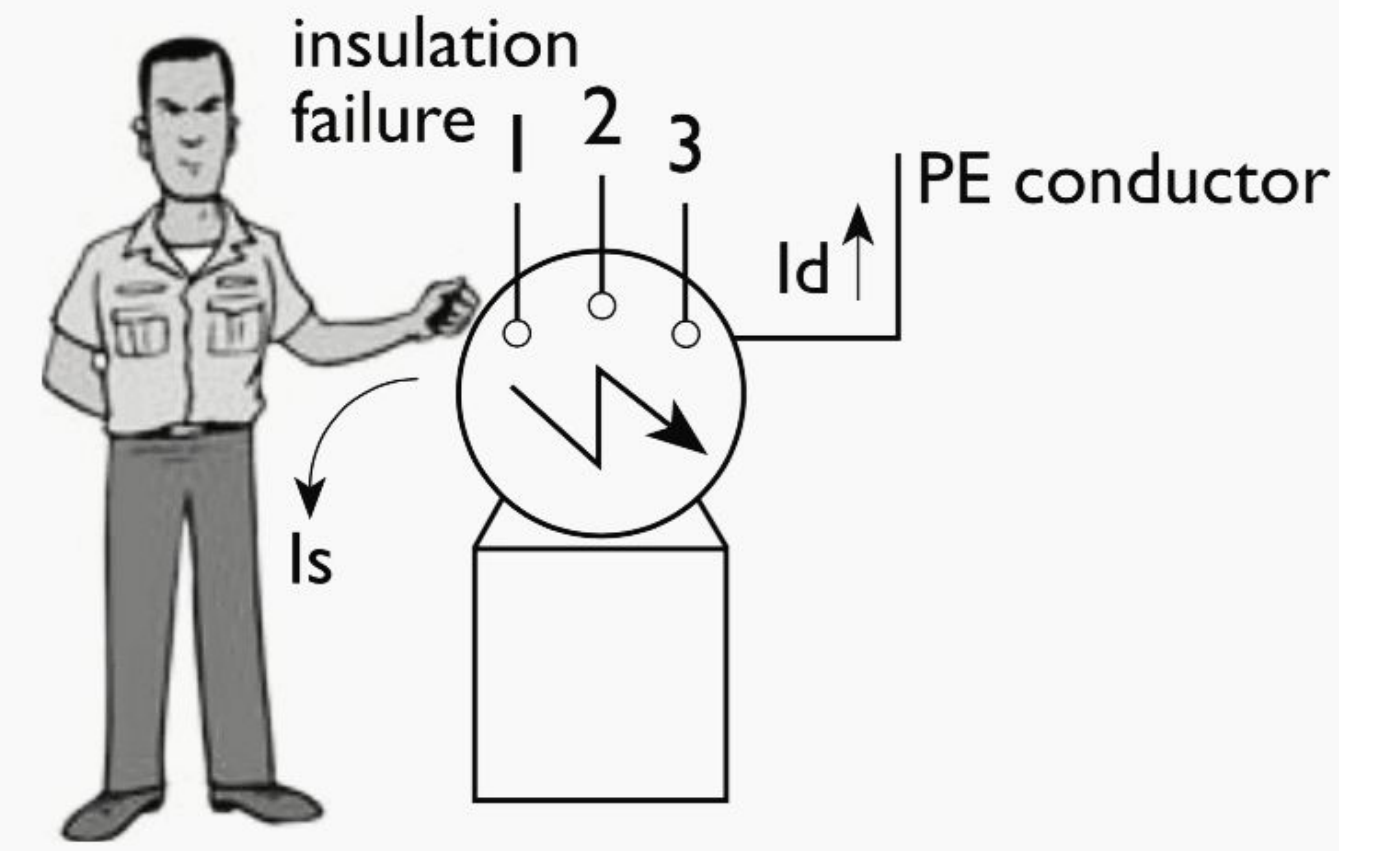
- Direct contact: it occurs when there is the contact with a live part of the system such as a conductor or an accessible terminal.
- Indirect contact: it occurs when there is the contact with a metallic component which is live due to an insulation fault.

DIRECT CONTACT



I_s - touch current

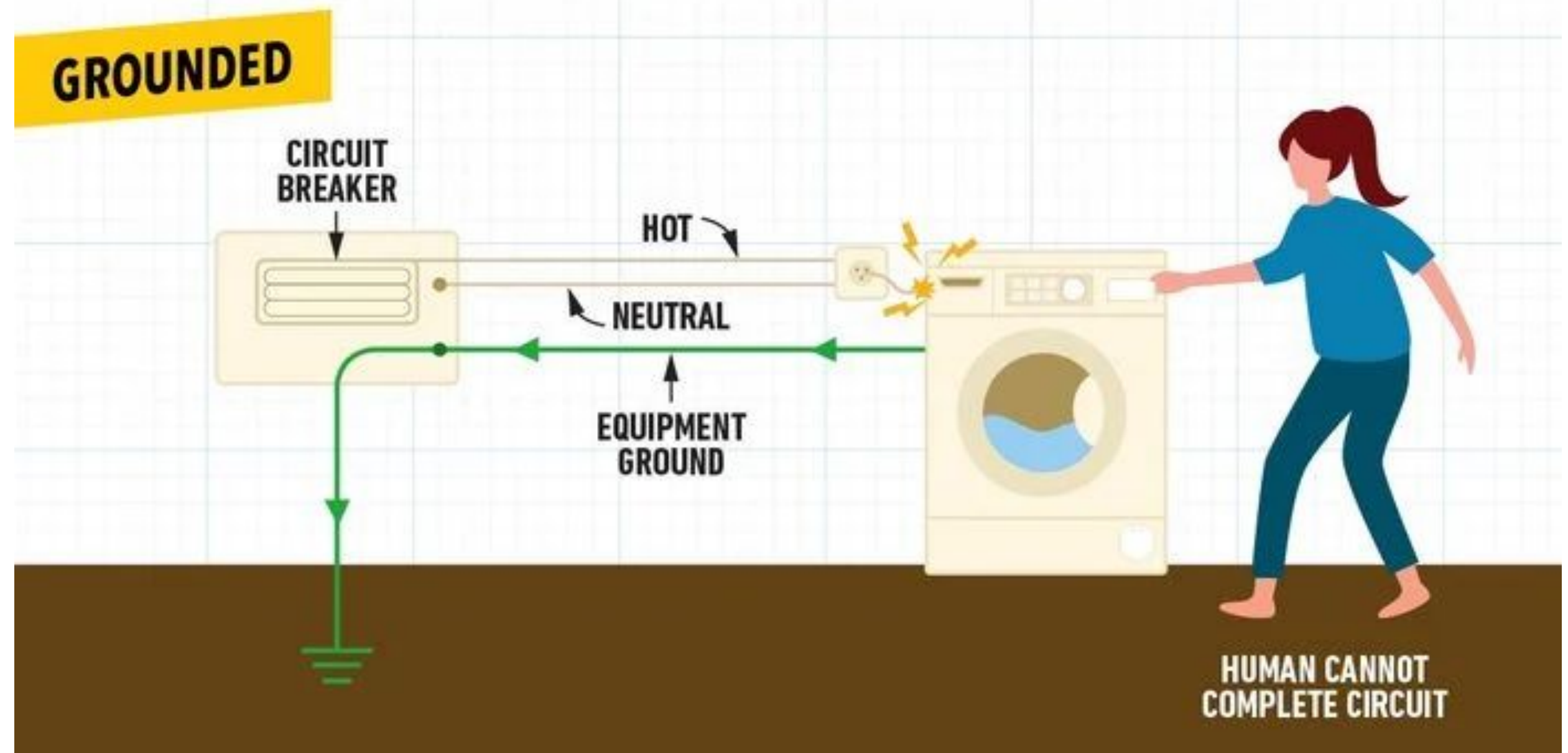
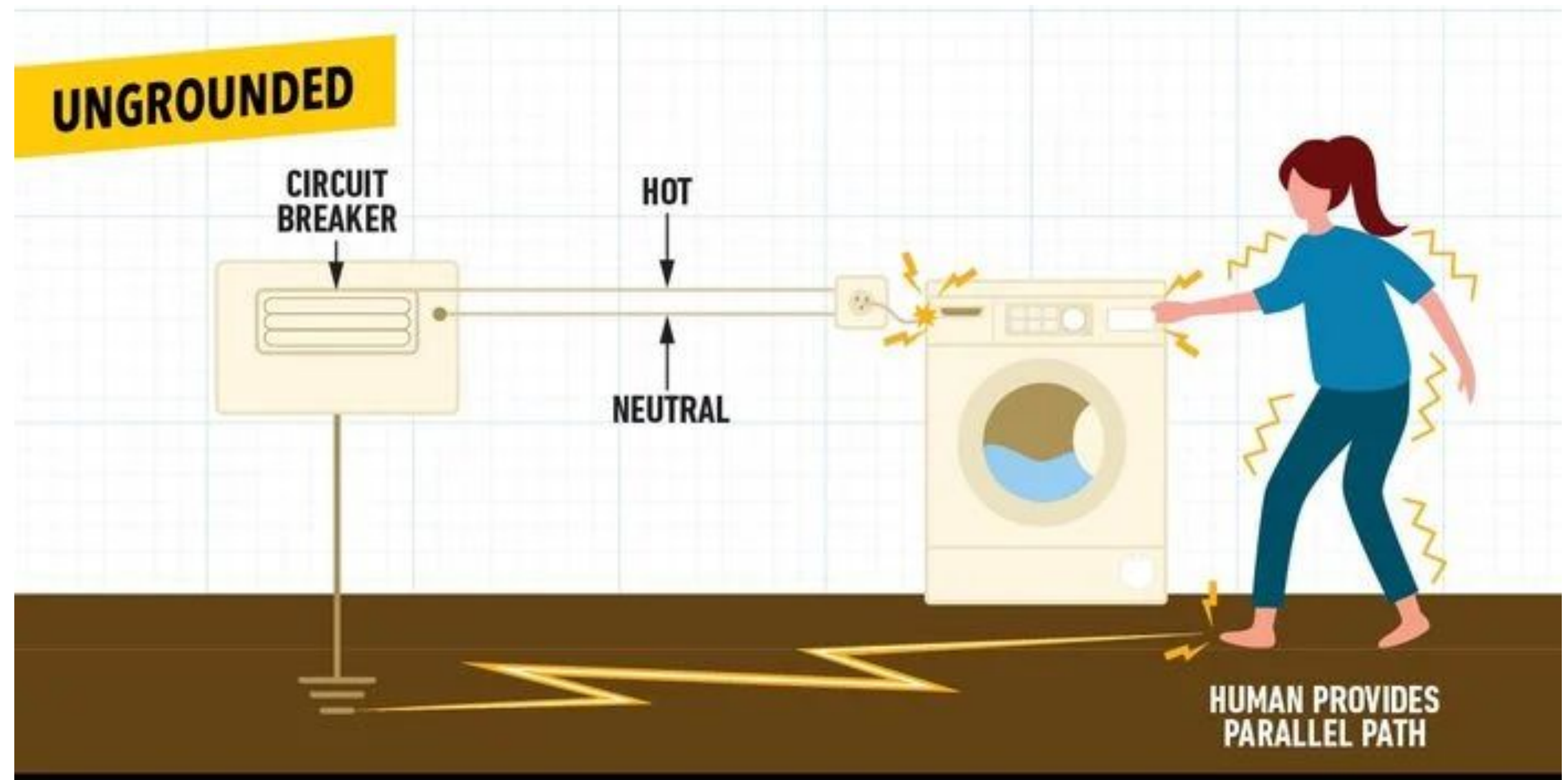
INDIRECT CONTACT



I_d - insulation fault current

Electric ground potential

The grounded system has the function to keep the metal parts of the household appliance and machinery at earth potential, i.e. 0V.



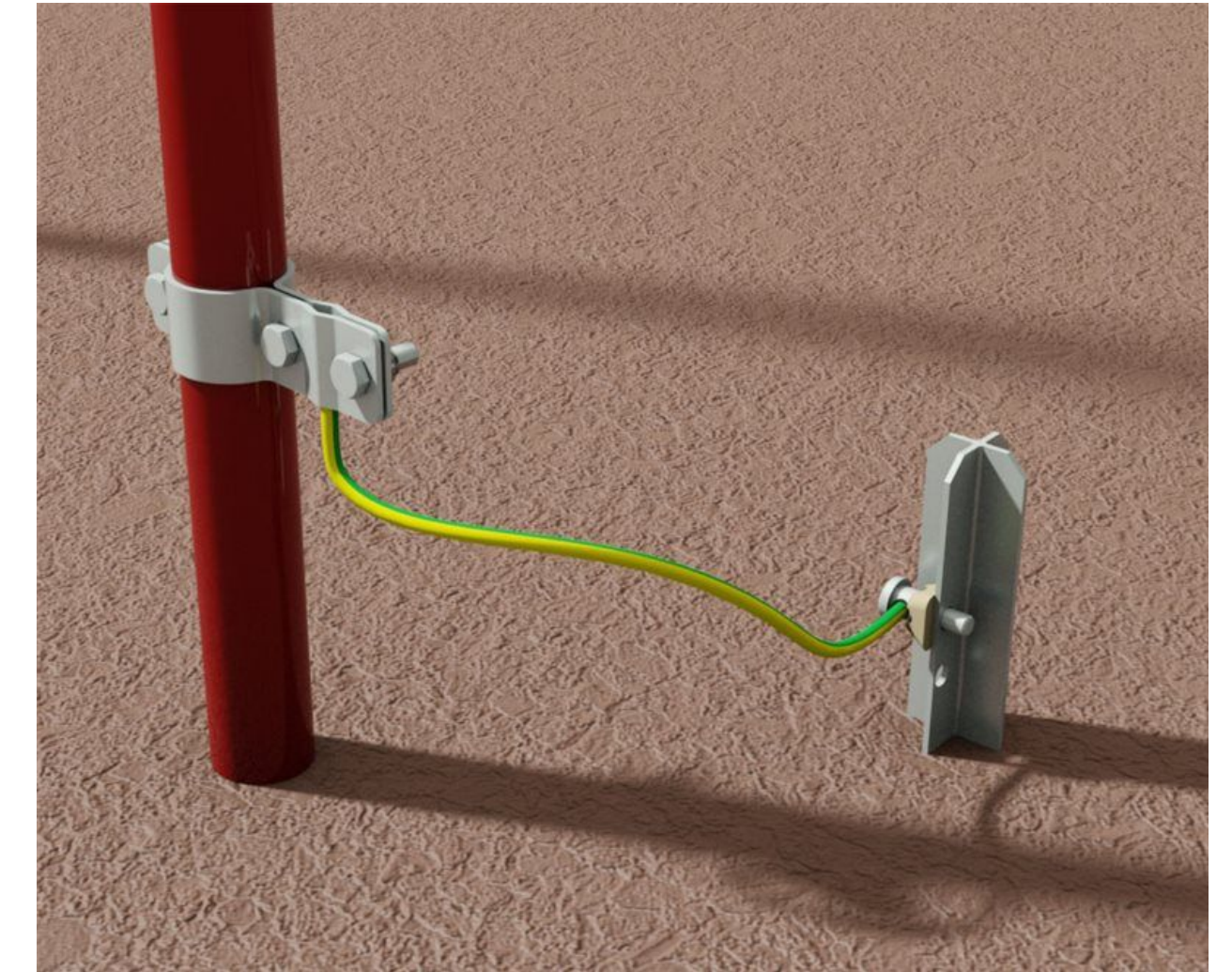
Main components of a grounding system



Protective conductors



Differential switch (circuit breaker)



Earth plate

Discussion topic #1

Have you ever experienced a mild electric shock?



Discussion topic #2

Have you ever felt household appliances vibrating?



Discussion topic #3

Do LED lights remain slightly bright after switching them off?

