

# Electricity & Safety Unit

## Teachers notes - Lesson 2 - Slide 18

### Dangerous situation 3



#### **Explain the following scenario to the students.**

John has been cutting down trees near the side of the road but hasn't paid attention to the surrounding power lines. This has caused some of the branches to fall on the power lines, where they are now stuck.

#### **Explore with your students some of the dangers involved in this scenario:**

- If John tries to get the tree branches down using a metal ladder and he accidentally touches the power line, a new electrical circuit could be made between John's body, the metal ladder and the ground, causing him to receive an electric shock
- If John touches the tree branches a new electrical circuit could be made with John's body (because of the water content in and on the tree branches) and the metal ladder, causing him to receive an electric shock.
- The fallen tree branches could damage the power line and start a fire
- Because of the potential for John to become part of the circuit, John should contact the local energy provider who has the proper training and equipment to safely remove the tree branches and make any necessary repairs to the power lines.