

## Hazards associated with using LPG:

Art metal: Industrial Technology

### Answers

#### **Activity 1: Hazards associated with LPG**

Examine the information in relation to the safe handling and use of LPG on the following web site

<[http://www.e-lpg.com/liquefied\\_petroleum\\_gas\\_safety.asp](http://www.e-lpg.com/liquefied_petroleum_gas_safety.asp)> and complete the following passage using the words from the word bank.

|           |         |          |           |        |
|-----------|---------|----------|-----------|--------|
| liquid    | heavier | gas      | cooling   | seen   |
| expansion | ice     | pressure | downwards | sealed |

Liquefied petroleum gas is stored under **pressure**. The gas will leak from any joint or connection that is not **sealed** properly.

Liquefied petroleum gas is **heavier** than air. Any significant leak will move **downwards** and stay on the ground. Since LPG is stored in two phases, liquid and gaseous, there is potential for either a **gas** leak or a **liquid** leak. If the liquefied petroleum gas leak is a gas leak it may not be **seen** (because LPG is colourless), except where the leak is of sufficient size to be seen shimmering in the air. When a liquid liquefied petroleum gas leak occurs, the gas release will be seen as a patch of **ice** around the area of the leak, or as a jet of white liquid. This white appearance is due to the **cooling** effect created by the rapid **expansion** of the LPG liquid into a gas.

**Activity 2: Safety rules for using LPG**

Complete the following points using the words from the word bank.

|         |         |       |         |
|---------|---------|-------|---------|
| replace | contact | soapy | upright |
| water   | never   | close |         |

1. Always **close** the LPG cylinder or tank valves after use.
2. **Never** check for gas leaks using a lit match.
3. Always use a solution of **soapy** water and look for bubbles coming from around valves and pipe joints.
4. **Replace** any damaged or worn hose with a new hose.
5. Stand the cylinder **upright**.
6. Ensure that any hose connection does not come into **contact** with or near the heat source.