

**GAUTENG DEPARTMENT OF EDUCATION**

**ONVERWACHT PRIMARY SCHOOL**

PAT marking guide

Activity 1

1. The jaws of life tool is used to cut accident damaged vehicles so that the people who are trapped can be freed. 🗸🗸

2. It is used by the emergency rescue services (firefighters also acceptable). 🗸🗸

3. It was invented in 1961. 🗸

4. It was invented by George Hurst. 🗸

5. Hydraulic system uses liquid (water or oil) 🗸

Pneumatic uses air or gas 🗸

6. Liquids are not compressible as compared to gas, so liquids are able to provide a stronger pushing force. 🗸🗸

(10)

Activity 2

1. Learners design brief must answer these questions:

* What are you going to do? 🗸
* Why are you doing it/what problem are you solving? 🗸

2. The model must:

* Be made with cardboard. 🗸
* Use split pins to join the cardboard pieces. 🗸
* Have a hydraulic system using syringes and plastic tubing. 🗸
* Be strong and sturdy. 🗸
* Be between 30mm to 60mm in length. 🗸

3. Learner must write 3 constraints.Can be:

* Time
* Money
* Availability of materials
* Tools

Learner must explain how the given thing is a limitation. 🗸🗸🗸

(10)