



WORKSHEET F - MEMORANDUM

Stored Energy in Fuels

Experiment: Which fuel burns best?

Your teacher did an experiment where a piece of wood was set alight with the help of paraffin. At the same time, a candle was lit. Complete the following information for the experiment.

- Write the topic

Burning fuels

- Question

Which fuel burns the best?

- Prediction. What do you think will happen? (What is your HYPOTHESIS?)

The candle burns better than the wood or

The wood burns better than the candle.

- Plan the investigation. List the materials that you are going to use.

stop watch / cell phone

***1 candle and 1 piece of wood (it must be the same weight)
paraffin; matches***

- List the method you are going to use (THE HOW)

- 1. Place the piece of wood on the ground. (select a safe spot)***
- 2. Pour paraffin over the wood.***
- 3. Set it alight and light the candle at the same time. [the wood and the candle must have the same weight]***
- 4. Monitor the time it takes the candle and the wood to burn out.***

- Collecting and Recording the data.

(Answers will differ depending on the weight of the candle and the piece of wood)

RESULTS AND OBSERVATIONS	
OBJECT	TIME TAKEN TO BURN OUT
CANDLE	
PIECE OF WOOD	

- Evaluating and communicating your results. What happened? Was your prediction (HYPOTHESIS) correct?

The learners will predict different times, e.g. :

Candle (e.g. 10 minutes; 20 minutes, etc.)

Piece of wood : (30 minutes – 1½ hour)

Note: The results will be influenced due to differences:

wood	<i>dryness, type of wood (akasia, doringhout, hawthorn, lemoenhout, black wattle, yellow birch, white birch, pruimhout, softwood, hardwood, rooikranshout, hazel black birch, etc.)</i>
candle	<i>colour, shape (spiral, smooth, riffled, grade of waxes, types of waxes, etc.)</i>