

Making and Testing Oxygen

Name: _____ Form: _____

Aim: To produce oxygen gas in a chemical reaction and to then test its effect on a flame.

Equipment: 250mL conical flask; 50mL beaker; heat-proof mat; tongs; icy-pole stick; matches; spatula.

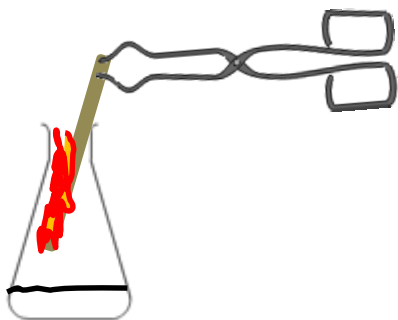
Note: Students should wear safety glasses.

Chemicals: manganese dioxide powder (MnO_2), 6% hydrogen peroxide (H_2O_2)

Method:

1. Place a small spatula full of manganese dioxide powder into the conical flask.
2. Set an icy-pole stick on fire. Let it burn a little.
3. Pour 20mL of hydrogen peroxide into the conical flask.
4. Blow the fire out and hold the glowing embers of the wood in the conical flask.

Diagram



Observations:

Questions:

1. Label the diagram above and draw in the two chemicals.
2. Write down the chemical equation for the reaction which produced the oxygen.

(word equation) _____

(symbol equation) _____

3. What was the role of the manganese dioxide powder?

4. Why do fire fighters hope for no wind?

Conclusion:
