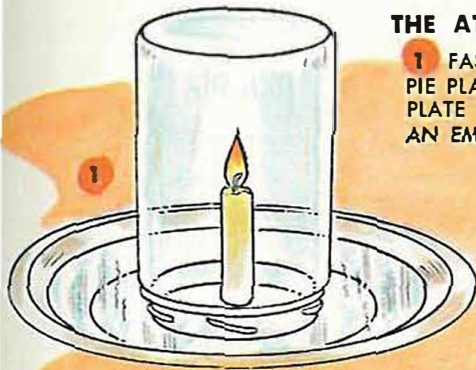
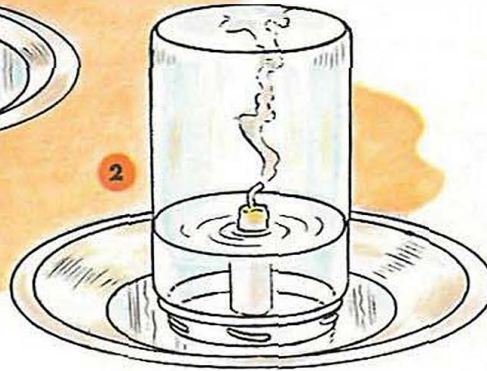


THE ATMOSPHERE CONTAINS OXYGEN



1 FASTEN A SMALL CANDLE TO MIDDLE OF PIE PLATE WITH CANDLE DRIPPINGS. FILL PIE PLATE WITH WATER. LIGHT CANDLE. PLACE AN EMPTY JAR OVER CANDLE.



2 A MOMENT LATER, CANDLE GOES OUT. WATER RISES IN JAR TO REPLACE OXYGEN USED.

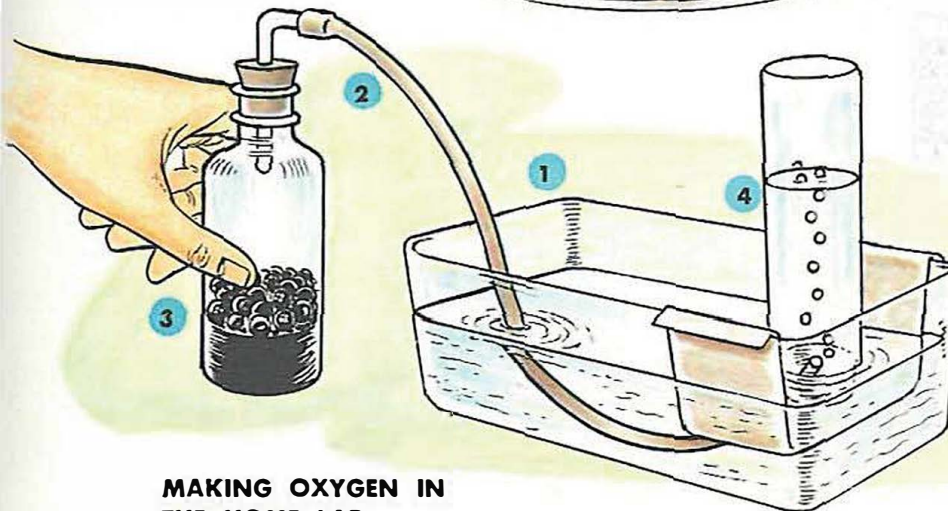
Oxygen Lab writeup instructions

Prepare a 1-1/2 to 2 page lab writeup using the 5 headings:

1. Lab title, your name, date submitted
2. Purpose of lab
3. Materials & methods
4. Results (or what happened)
5. Conclusion

Include sketches, pictures, diagrams as needed.

Submit your completed work as an email attachment.



MAKING OXYGEN IN THE HOME LAB

1 TO COLLECT OXYGEN, YOU NEED A "PNEUMATIC TROUGH." THIS IS A DEEP, WATER-FILLED TRAY WITH METAL "BRIDGE."

2 FIT BOTTLE WITH STOPPER WITH L-SHAPED GLASS TUBE AND RUBBER TUBE LONG ENOUGH TO REACH HOLE OF BRIDGE.

3 FILL BOTTLE $\frac{1}{4}$ FULL OF 3% HYDROGEN PEROXIDE. ADD $\frac{1}{8}$ TEASPOON OF MANGANESE DIOXIDE. PUT THE STOPPER IN.

4 FILL JAR WITH WATER AND PLACE IT UPSIDE DOWN ON THE BRIDGE IN SUCH A WAY THAT THE OXYGEN BUBBLES INTO IT AND FILLS IT BY FORCING OUT AND REPLACING THE WATER

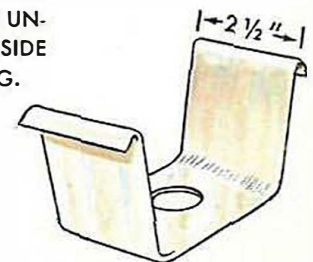
5 WHEN JAR IS FULL OF OXYGEN, SLIDE A GLASS PLATE UNDER OPENING (OR PUT STOPPER IN IT). TURN JAR RIGHT SIDE UP—QUICKLY, TO PREVENT THE OXYGEN FROM ESCAPING.



MANY MATERIALS BURN IN OXYGEN

1 ATTACH TUFT OF STEEL WOOL TO WIRE. HEAT TO RED HEAT OVER ALCOHOL BURNER. LOWER INTO JAR OF OXYGEN. IRON BURSTS INTO FLAME.

2 PLACE SMALL PIECE OF SULFUR IN CROOK OF BENT STRIP OF TIN CUT FROM CAN. IGNITE SULFUR WITH MATCH. LOWER INTO JAR OF OXYGEN. SULFUR BURNS WITH A BRILLIANT, BLUE LIGHT.



"BRIDGE" FOR "PNEUMATIC TROUGH" MADE FROM $2\frac{1}{2}$ " STRIP OF TIN CAN.