
Question:

What is the hottest part of a Bunsen burner's flame?

Hypothesis:

Materials:

1 Bunsen burner	10 cm fine copper wire
1 sparker	1 forceps
1 heat resistant pad	1 ruler
1 wire gauze	

Hazards:

The standard safety contract applies.

Procedure:

1. **Draw** a detailed diagram of the Bunsen burner in the data section.
2. **Label** each part of the burner on the diagram.
3. **Draw** a diagram of the gas jet, both ON and OFF, in the data section.
4. Attach the tubing to the gas jet.
5. Partially close the air ports on the burner.
6. Turn on the gas jet until the gas can be heard.
7. Hold the sparker slightly above the mouth of the barrel.
8. Light the Bunsen burner using the sparker.
9. Measure the flame.
10. Close the air ports completely.
11. **Record/sketch observations of flame.**
12. Open the air ports completely.
13. **Record/sketch observations of flame.**
14. Adjust the height of the flame using the gas jet and air ports until the flame has a sharp, strong inner cone.
15. Using forceps, insert a 10 cm piece of copper wire into the flame just above the barrel.

16. Lift the wire SLOWLY through the flame.
17. Using the forceps, insert the copper wire into the flame at the top of the flame.
18. Slowly lower the wire down to the mouth of the barrel.
19. **Record/sketch observations of the copper in the flame.**
20. Show the teacher the special flame!
21. Get her signature for the special flame.
22. Dispose of copper wire in the sand bucket.
23. Clean up and get clean-up signature.

Data: