

**Description of a Burning Candle**      Name \_\_\_\_\_ Period \_\_\_\_\_

Circle QL for qualitative observation (characteristic) and QT for quantitative observation (measurement). Be ready to discuss the reasons for your choices.

- |          |   |          |   |
|----------|---|----------|---|
| QT or QL | 1. The candle is cylindrical in shape.  | QT or QL | 22. When no currents disturb it, the flame is shaped like an elongated teardrop.  |
| QT or QL | 2. It is about _____ centimeters in diameter.   | QT or QL | 23. The flame begins about 1-cm above the top of the candle.  |
| QT or QL | 3. The length is about _____ centimeters.   | QT or QL | 24. The flame is a shade of blue at its base.   |
| QT or QL | 4. The length decreased during the observation period.                                    | QT or QL | 25. Immediately around the wick in a region about 1-cm wide and extending about 1-cm above the top of the wick, the flame is dark.      |
| QT or QL | 5. The amount of decrease was about _____ centimeters per half hour.                      | QT or QL | 26. This dark region is roughly conical in shape.   |
| QT or QL | 6. The candle is translucent.   | QT or QL | 27. Around this zone and extending about 1-cm above the dark zone is a region which emits yellow light that is bright but not blinding. |
| QT or QL | 7. It is white (or yellow, etc.).   | QT or QL | 28. The flame has sharply defined sides but a ragged top.   |
| QT or QL | 8. It has a slight odor.  | QT or QL | 29. The wick is white where it emerges from the candle but is dark as if burnt from the base of the flame to within 2-mm of the top.    |
| QT or QL | 9. It has no distinct taste.  | QT or QL | 30. The last 2-mm of the wick glows red.  |
| QT or QL | 10. It is solid.  |          |   |
| QT or QL | 11. It is soft enough to be scratched with a fingernail.                                  |          |   |
| QT or QL | 12. A relatively thick string extends about 1-cm from the upper end of the candle.        |          |   |
| QT or QL | 13. It is made of _____ (#) strands of string braided/twisted together.                   |          |   |
| QT or QL | 14. The string or wick ignites when a lighted match is held next to it for a few seconds. |          |   |
| QT or QL | 15. The wick then burns continuously.   |          |   |
| QT or QL | 16. The burning candle makes no sound.  |          |   |
| QT or QL | 17. The burning candle remains cool while the wick burns.                                 |          |   |
| QT or QL | 18. It is warm near the top.  |          |   |
| QT or QL | 19. The candle material is softer around the top as it burns.                             |          |   |
| QT or QL | 20. The flame flickers in response to air currents.                                       |          |   |
| QT or QL | 21. When the flame flickers, smoke comes from it.   |          |   |

