

OBSERVING A CANDLE

MATERIALS: Candle, clay, fire-proof dish, ruler (**Get a candle and clay from Ms. Skinner.)

PROCEDURE:

1. Use clay or a similar material to stand the candle on your desk or on a fire proof dish and observe the candle in three (3) different situations described below.
2. LIST the properties of a candle that you observe down the page, not across the line. Be very, very careful to list the observations under the appropriate column. You will receive no credit for observation in the wrong column.

OBSERVATIONS:

- (A) **Before lighting the candle** - *Observe the candle for 5 minutes. Record at least 10 total observations - at least 2 observations must be quantitative.*

	QUALITATIVE	QUANTITATIVE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

- (B) **While the candle is lit** - *Observe both the candle itself and the flame for no more than 5 minutes. DO NOT place the ruler in the flame - just get an estimate!! Record at least 15 total observations - at least 3 observations must be quantitative.*

	QUALITATIVE	QUANTITATIVE
1		
2		
3		

(B) **While the candle is lit (Continued)** - *Observe both the candle itself and the flame for no more than 5 minutes. DO NOT place the ruler in the flame - just get an estimate!! Record at least 15 total observations - at least 3 observations must be quantitative.*

	QUALITATIVE	QUANTITATIVE
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

(C) *After you start blowing out the candle. Observe the candle, flame, etc., for at least 5 minutes after you first blow out the flame. Record at least 20 more total observations - at least 5 observations must be quantitative.*

	QUALITATIVE	QUANTITATIVE
1		
2		
3		
4		
5		
6		
7		

(C) After you start blowing out the candle (Continued). *Observe the candle, flame, etc., for at least 5 minutes after you first blow out the flame.* Record at least 20 more total observations - at least 5 observations must be quantitative.

8		
9		
10		
11		
12		
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19		
20		

3. When you have finished all observations, BEFORE you throw away the candle, douse the candle in water to make sure that it is completely extinguished.

ANALYSIS:

1. In your observations table, circle or put a star by the properties that are EXTENSIVE.
2. Was what you observed a physical change or a chemical change? Give reasons for your answer.