

**Chemical Reaction or Physical Change
S'mores Lab**

Background: You have studied the difference between a chemical reaction and a physical change. Now it is time to put your knowledge to the test (and eat food, too!)

Procedure:

You will use a burner to roast a marshmallow (they are perfectly safe to eat!)

You will use your roasted marshmallow to make a s'more

Answer all the questions below.

Warnings:

Do NOT start the skewer on fire

Should your marshmallow accidentally catch fire – simply blow it out.

Conclusion Questions:

1. What are three indicators that a chemical reaction has taken place?
 - 1.
 - 2.
 - 3.
2. What “new substance” was formed on your marshmallow when you roasted it?
(You can describe it if you don't know what it is called)
3. What happened to the chocolate when you put your roasted marshmallow on it?

Using the list of things that happened during your s'more making, circle if it was a chemical or physical change:

- | | | |
|--|----------|----------|
| 4. Marshmallow got warmer | CHEMICAL | PHYSICAL |
| 5. Marshmallow turned brown | CHEMICAL | PHYSICAL |
| 6. Chocolate melted | CHEMICAL | PHYSICAL |
| 7. Black “stuff” formed on the marshmallow | CHEMICAL | PHYSICAL |
| 8. You broke the graham cracker in half | CHEMICAL | PHYSICAL |
| 9. You bit the s'more with your teeth | CHEMICAL | PHYSICAL |
| 10. The s'more was digested | CHEMICAL | PHYSICAL |