

Burn Lab – You are going to be burning different fibers and determining if they are natural or synthetic fibers based on the odor & look of how it burns. Use this chart below to tape into your output. Be sure to describe what it is.

Fiber #1	Rate of burn (circle 1)	Odor (circle 1)	Ash (circle 1)	Synthetic or Natural?
Plant	Very Fast	Campfire/ Burning paper	Soft Black	Can you name the fiber?
Animal	Medium but self extinguishes outside of flame	Burning hair blow dryer	Crushable black	
Synthetic	Melts	Chemical	Hard Black	

Fiber #2	Rate of burn (circle 1)	Odor (circle 1)	Ash (circle 1)	Synthetic or Natural?
Plant	Very Fast	Campfire/ Burning paper	Soft Black	Can you name the fiber?
Animal	Medium but self extinguishes outside of flame	Burning hair blow dryer	Crushable black	
Synthetic	Melts	Chemical	Hard Black	

Fiber #3	Rate of burn (circle 1)	Odor (circle 1)	Ash (circle 1)	Synthetic or Natural?
Plant	Very Fast	Campfire/ Burning paper	Soft Black	Can you name the fiber?
Animal	Medium but self extinguishes outside of flame	Burning hair blow dryer	Crushable black	
Synthetic	Melts	Chemical	Hard Black	

Safety tips:

- You must be outside
- You must keep everything for this activity on/over the pie tin
- Only use the tweezers to hold the fabric swatch in the flame, not your fingers!
- Only ignite a small part of the fabric, and then take it out of the flames to observe the results
- Don't blow on the swatch to get the flame out. It will spread sparks or ash.
- Don't touch the ash until it has a chance to cool. (synthetic fibers can melt your skin)

If you finish before class ends check out these video clips

<https://youtu.be/PD83dqSfCOY> (Interesting movie clip about making the Harry Potter Invisibility Cloak a reality)

<https://youtu.be/7is6r6zXFDc> (Clip about a spray you can get for clothing to protect it from spills, mud, etc.)