

NAME:

PERIOD:

College & Career Awareness

Clothes on the Grow

Overview: Clothing began with animal skins being fashionable and has progressed to 'high-tech' fabrics. There are hundreds of fabrics available today. Almost all our clothes are made of fibers. Fibers are thin threads. The hairs on your head are fibers. Like human hair, fibers can be straight or curly, smooth or course. Most fibers can be lumped into two categories: natural and synthetic. Today we are going to see and smell the difference between natural fibers and synthetic fibers.

Essential Questions: What fiber do you think would be best for a snow boarder? For summer wear? Which fiber would be safest for young children? What careers are associated with fiber/textile production?

Checklist:

_____ Watch clip from Incredibles with Edna Mode

_____ If you were to invent a fiber that could do anything, what would it do? (List your response in the box below)

My Dream Fiber:

NOTE: There is a great PowerPoint on the student drive that can help you fill our your tables below. Student drive>jr high>college & career awareness>fibers

NATURAL FIBERS - List some descriptors of natural fibers

Fiber	Where it comes from	Uses/examples	Characteristics	Under a magnifying Glass?
Cotton				

Wool				
Linen				
Silk				

Synthetic Fibers – list three descriptors of synthetic fibers

Fiber	Where it comes from	Uses/examples	Characteristics	Under a magnifying Glass?
polyester				

nylon				
spandex				

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

Fiber	Rate of burn	Odor	Ash	Sample #
Plant	Very Fast	Campfire/ Burning paper	Soft Black	
Animal	Medium but self extinguishes outside of flame	Burning hair blow dryer	Crushable black	
Synthetic	Melts	Chemical	Hard Black	

Safety tips:

- 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/PD83dqSfC0Y> (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.)

