What to Wear Teacher Handout

1. Wicking fibers contain small grooves that pull moisture away from the skin and forces it to the surface clothing so that it can readily evaporate.

2. Wicking fibers which are small fabric structures each containing many small grooves. In general you will receive various answers for this question.

3. Students may find wicking fibers are also used to make diabetic socks and have multiple odor removal applications.

4. Students should have sample sizes that are the same area and will wet the fibers with water (some amount that would not exceed saturation of their sample). Students may have chosen to use a scale to weigh the material over time or may choose a more qualitative analysis and observed which material dried fastest.

You may further the students understanding by trying this group activity: The Sweat Challenge
You can measure how much better one material works over the other in wicking ability. Select a student (one that sweats a lot would be great for this activity) wear cotton and sweat from running a certain amount of time. Use the same student to wear an under armour shirt the next day and repeat the physical activity. You should take pre and post weights each day. Measure the amount of water retained by the material. You may want to control some aspects like what and how much they drink before each run, and be sure they do the same activity the same amount of time each day.

References:

- http://bazaarinegypt.com/catalog/images/T-SHIRT01.jpg (cotton t-shirt picture)
- http://images.google.com/imgres?imgurl=http://www.teamsportsoftexas.com/custom/photos/0141underarmour.jpg&imgrefurl=http://www.teamsportsoftexas.com/product.asp%3FProductID%3D19377&h=450&w=450&sz=21&hl=en&start=7&tbnid=Vcart-JkaIV3kM:&tbnh=127&tbnw=127&prev=/images%3Fq%3Dunder%2Barmour%26gbv%3D2%26svnum%3D10%26hl%3Den (under armour® picture)
- http://www.pslc.ws/macrog/level1.htm (pictures of glucose and cellulose)