Answer Key

Great Balls of Fire!

| Fiber | Easy or difficult to ignite? | Source of fabric | Product/uses | Rate of Burn (fast/slow) | Odor | Ashes |
|-----------|---------------------------------|---|--|-----------------------------|------------------|-------------------------------|
| Wool | Difficult | Wool is shorn from sheep (Utah ranks 6th in U.S. sheep production) | Sweaters, pants, coats, mittens, hats | Slow | Burning hair | Crushable black ash |
| Cotton | Easy | Fiber surrounding the seed of the cotton plant | Jeans, T-shirts, sheets, underwear | Fast | Burning paper | Soft ash |
| Polyester | Smolders, doesn't really ignite | Petroleum | All kinds of clothing and household goods | Fast | Sweet | Hard black bead |
| Nylon | Smolders, doesn't really ignite | Petroleum | Exercise/sports clothing, nylons | Fast | Chemical | Brittle black hard bead |
| Linen | Easy | Fiber from the stem of the flax plant | All kind of clothing and household goods | Fast | Burning paper | Soft ash |
| Acrylic | Smolders, doesn't really ignite | Petroleum | Sweaters, shirts, and other clothing items | Fast | Chemical | Brittle black hard bead |
| Silk | Difficult | Filaments which silkworms spin to make their cocoons | Evening wear, ties, undergarments, bed linens | Slow | Burning hair | Crushable black ash |
| Other | | | | | | |

Great Balls of Fire Questions

1. Wool provides insulation and cotton releases body heat. In some desert regions they wear wool, thinly woven wool, because it breathes, and it can also insulate from extreme heat.

The answers to questions 2-9 will vary.

Clothing Rack Consumer

| 1. 5 | 2. 12 | 3. 1 | 4. 1 | 5. 13 | 6. 16 |
|--------|-------|--------|--------|-------|-------|
| 7. 3 | 8. 4 | 9. 10 | 10. 11 | 11. 2 | 12.8 |
| 13. 14 | 14. 7 | 15. 15 | 16. 9 | | |

Clothing Historian

India, Egypt, China, Mexico, and Peru
Iraq, wool
the cotton gin
silkworms

3. flax and linen, 7000 years old