

## 8.1.4 Quiz Review

Natural	Synthetic

Below is a table comparing the properties of 5 different fibers.

	Acrylic	Cotton	Nylon	Polyester	Viscose
Source	Polyacrylonitrile derived from coal, air, water, and limestone	Plant fibers	Organic compounds derived from coal, petroleum, or plant oils	Polyethylene terephthalate derived from petroleum	Cellulose obtained from wood pulp and then treated
Flammability	Burns with yellow flame	Burns	Melts slowly; does not burn	Burns slowly	Burns rapidly
Effect of Sunlight	Little or no effect; very resistant to UV radiation	Loss of strength after long exposure	No change in color; some loss of strength after a long exposure	No change in color; some loss of strength	Mostly resistant; loss of strength after long exposure
Water absorption	1-3%	7-11%	4%	Less than 1%	15%
Strength	Fair to Good	Good	Exceptionally high	Good to Excellent	Fair