1. In Teflon® tape, are the polymer strands arranged randomly or in parallel? Describe your evidence.

2. What would be the benefits and what would be the problems of using synthetic fibers, such as the nylon, instead of natural fibers, such as wool?

3. From your observations, is the synthesis of polyurethane foam endothermic or exothermic? Describe your evidence.

4. Both polyurethane foam and Polyvinyl alcohol gel contains cross-links. What are cross-links?

5. How do the strengths of cross-links in these two polymers compare to each other?

6. What is the difference between a monomer and monomeric unit?

7. What are the monomers of polyethylene and Teflon?

8. Some people object to synthetic polymers, saying that polymers are not “natural.” Give examples of two natural polymers.