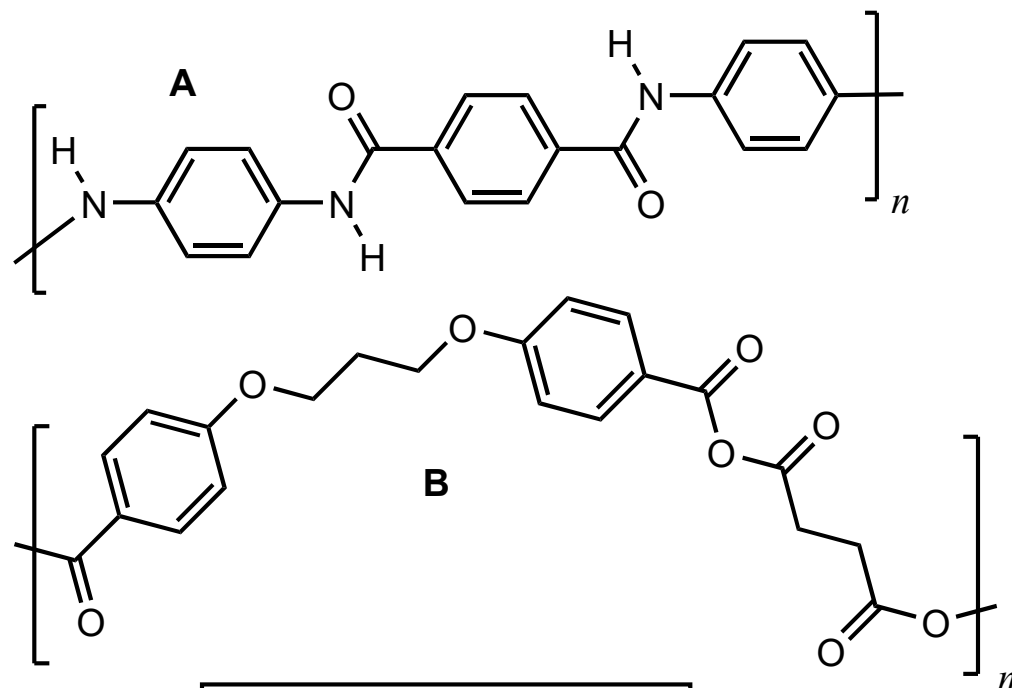


One of these polymers is very strong and durable (bulletproof vests) and the other is easily hydrolyzed (biodegradable). Identify each polymer and explain the difference in properties. What monomers could be used to make each polymer?



**Strong & Durable**

**Biodegradable**

- A) **A** because amide bonds are flexible
- B) **A** because amide C=O is electron-rich and can form H-bonds
- C) **B** because oxygen atoms make the polymer polar
- D) **B** because anhydrides have good LG's

**B** because oxygen atoms make the polymer polar

**B** because anhydrides have good LG's

**A** because amide C=O is electron-rich and can form H-bonds

**A** because amide bonds are flexible