## Chemistry 2302

## Workshop 27 Solutions <br> Bisphenol A Polycarbonate, and the Alternatives

1. Multiple repeat units:


## Using brackets:



OR


Out of these two bracket structures, the first one is incorrect on a technicality; it ends in a hydrocarbonate group ( $-\mathrm{O}(\mathrm{CO}) \mathrm{OH}$ ) on the right side, which spontaneously loses $\mathrm{CO}_{2}$ to yield an alcohol. But you wouldn't necessarily know that, so l'd accept either answer if this problem had been on an exam.

Both of these structures illustrate an alternating copolymer, with perfect alternation of bisphenol A and phospgene components.





3.






