

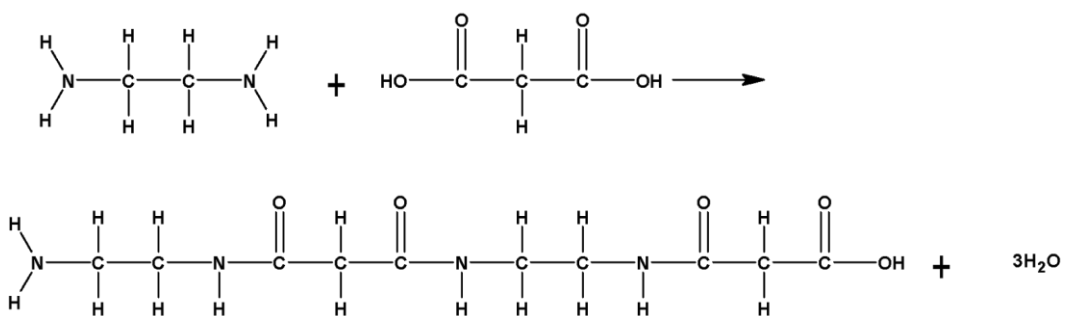
**MINISTRY OF EDUCATION**  
**SECONDARY ENGAGEMENT PROGRAMME**  
**GRADE 11**  
**CHEMISTRY**

**WEEK 11**

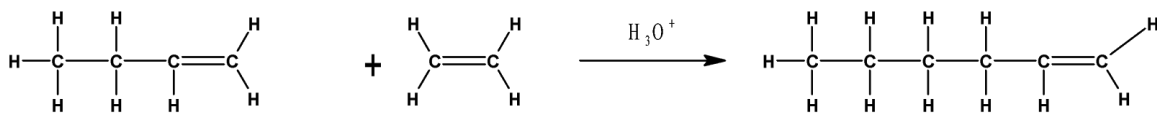
**WORKSHEET**

1. Identify the type of polymerization in each of the following:

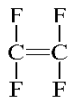
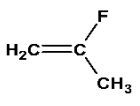
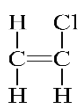
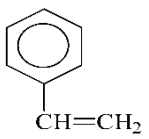
a.



b.

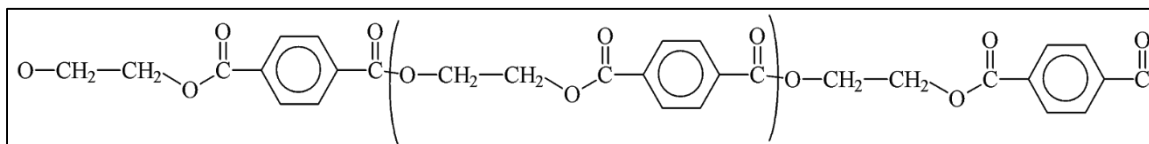


2. For each of the following, draw three linked monomer units of the polymer's structure:

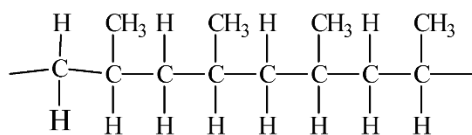
Monomer	Polymer	Structure
a. 	Teflon (non-stick coating )	
c. 	Tedlar (used to weatherproof building materials)	
d. 	Polyvinyl chloride (PVC )	
e. 	Polystyrene (#6 plastic )	

3. Draw the structure for the monomer(s) from which the following polymer is made and name the type of polymer (addition, polyester or polyamide).

a) PETE (polyethylene terephthalate)



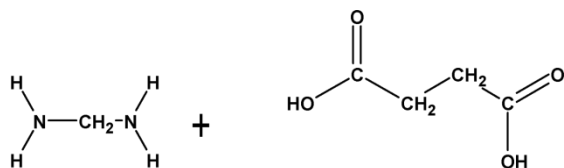
b) PP (polypropylene)



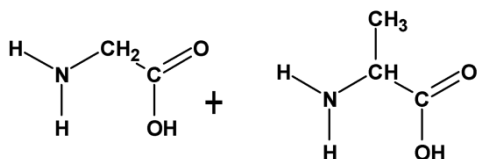
:

4. Draw the structure of the polymer which would form when the following molecules react. (draw two units)

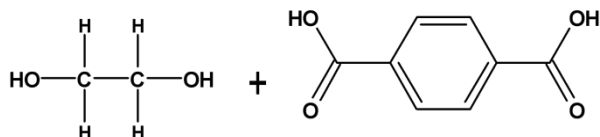
(a)



(b)



(c)



MINISTRY OF EDUCATION  
SECONDARY ENGAGEMENT PROGRAMME

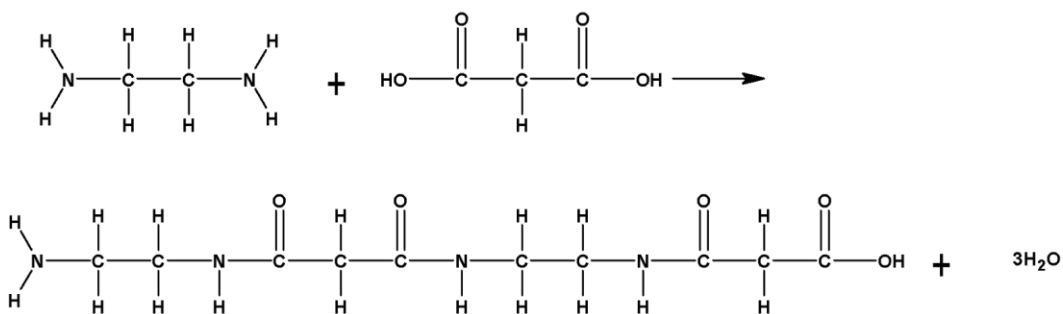
GRADE 11  
CHEMISTRY

WEEK 11

WORKSHEET - ANSWERS

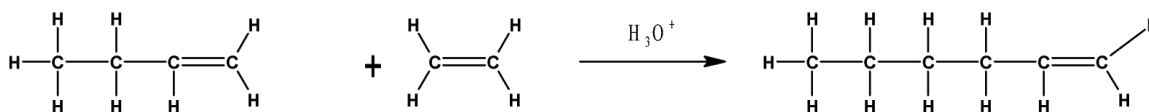
1. Identify the type of polymerization in each of the following:

a.



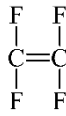
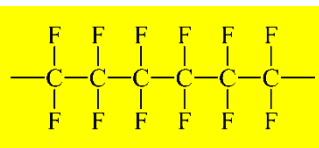
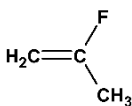
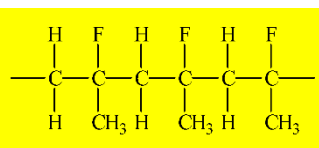
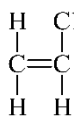
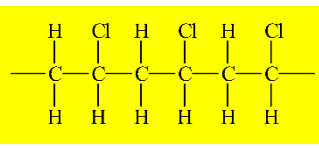
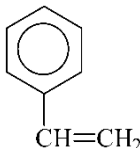
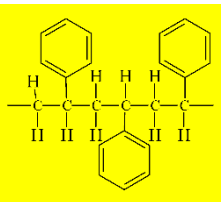
Condensation - formation of polyamide

b.



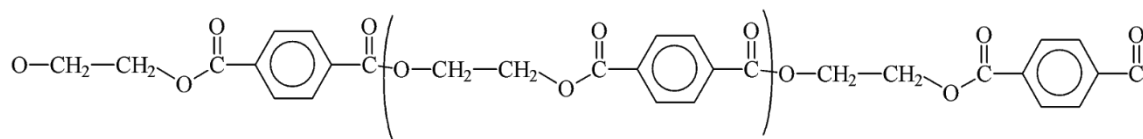
Addition

2. For each of the following, draw three linked monomer units of the polymer's structure:

Monomer	Polymer	Structure
a. 	Teflon (non-stick coating )	
c. 	Tedlar (used to weatherproof building materials)	
d. 	Polyvinyl chloride (PVC )	
e. 	Polystyrene (#6 plastic )	

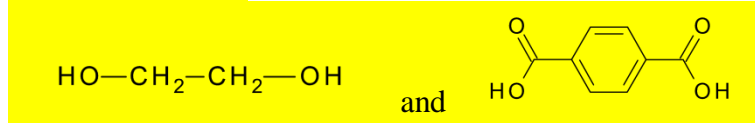
3. Draw the structure for the monomer(s) from which the following polymer is made and name the type of polymer (addition, polyester or polyamide).

a) PETE (polyethylene terephthalate)

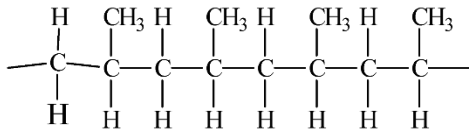


**Polyester**

the monomers are:

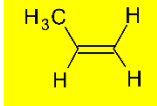


b) PP (polypropylene)



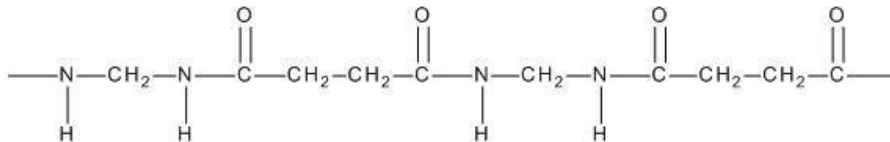
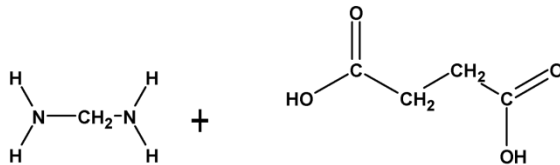
Addition

the monomer is:

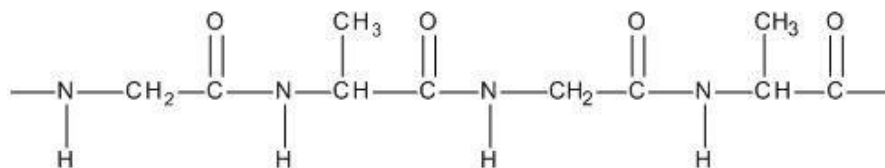
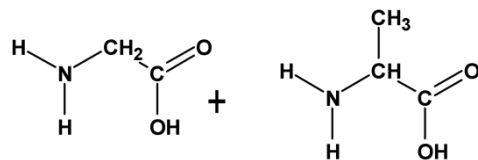


4. Draw the structure of the polymer which would form when the following molecules react. (draw two units)

a.



(b)



(c)

