South Pasadena •	AP Chemistry
------------------	--------------

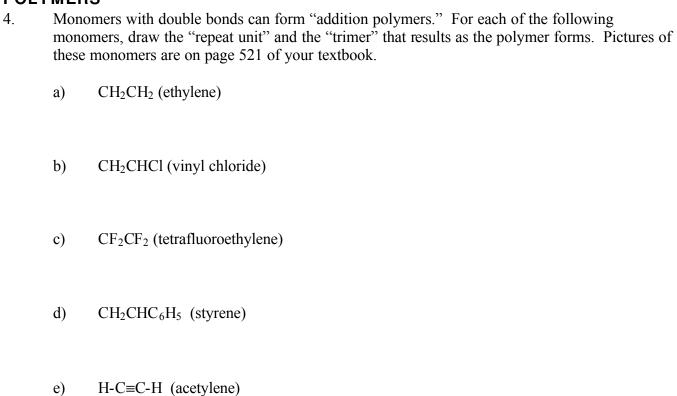
Name					
Date -	/	/	Period		

## 11 • Carbon Chemistry

ES <sup>-</sup>	ΓFF	25	ጼ	ΔΝ	ЛΙ	D	FS
$ \circ$			Œ	$\sim$	V I I	$\boldsymbol{\omega}$	$-\mathbf{u}$

		· ·	Esters	& Polymers
EST	ERS &	AMIDES		,
1.	Work a)	you way through an esterification reaction: Draw CH <sub>3</sub> CH <sub>2</sub> COOH and CH <sub>3</sub> CH <sub>2</sub> OH You have drawn a(n) with the names	and a(n) and	·
	b)	Highlight the OH on the first molecule and leave to become H <sub>2</sub> O. We call this a conde amides are formed and when proteins are f	ens ation reaction. We will also	
	c)	Draw the ester (ethyl propanoate):		
2.		the following ester, draw and name the carb CH <sub>2</sub> COOCH <sub>2</sub> CH <sub>3</sub>	oxylic acid and alcohol that for	med it.
3.	Draw	CH <sub>3</sub> COOH and CH <sub>3</sub> NH <sub>2</sub> . They can react to	o form an amide. Draw the ami	de molecule.

## **POLYMERS**



5. Polyesters (a condensation polymer) can be formed from two different monomers, a di-acid and a di-alcohol. Draw the two monomers and draw a polymer made of three of each unit.

di diconoi. Diaw die two monomers and diaw	a polymer made or three or each ant.
HOOCC <sub>6</sub> H <sub>4</sub> COOH	HOCH <sub>2</sub> CH <sub>2</sub> OH
benzene ring with two acid groups in para positions	ethane with an –OH group on each carbon