

7.6 Kunststoffen (ca. 10 lestijden)

BRUSSEL D/2017/13.758/019 September 2017
(vervangt leerplan D/2008/7841/002)

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Sint-Victor
Turnhout

5-6 TSO Handel - TSO Informaticabeheer
februari 2019

	1
	Ia
	✕
1	1 2,1 1 H 1,0079

14	15	16	17	18	
IVa	Va	Vla	VIIa	0	
✕	✕	✕	✕	✕	
				2 He 4,0026	2 K
6 C 12,011	7 N 14,0067	8 O 15,9994	9 F 18,9984	10 Ne 20,179	2 K L
			17 Cl 35,453	18 Ar 39,948	2 K L M

elektronegativiteit	elektronen per schil
atoomnummer	
symbool	
	metaal of niet-metaal
	atoommassa

29

1,9

2

8

18

1

Cu

63,546

Grieks in het Nederlands

- Wat betekent mono?
- Wat betekent poly?
- Wat betekent thermo?



PETE



HDPE



V



LDPE



PP

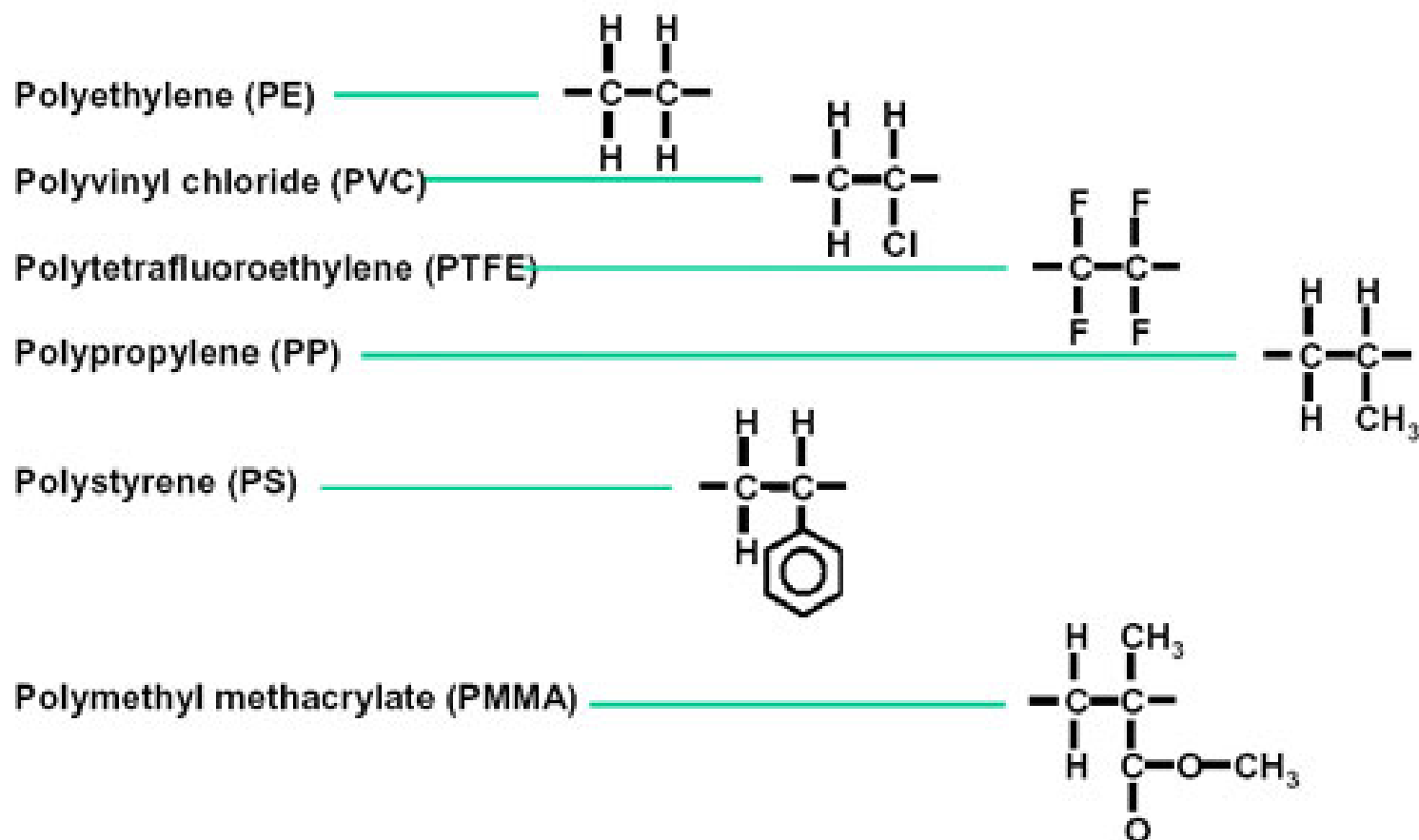


PS

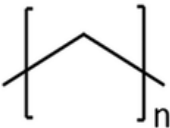
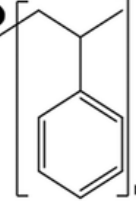
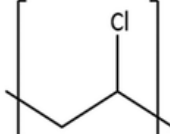
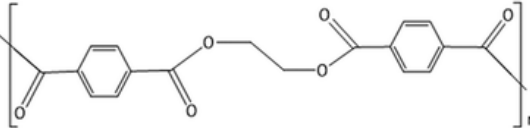
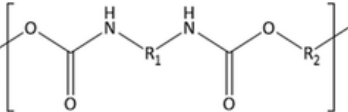


OTHER

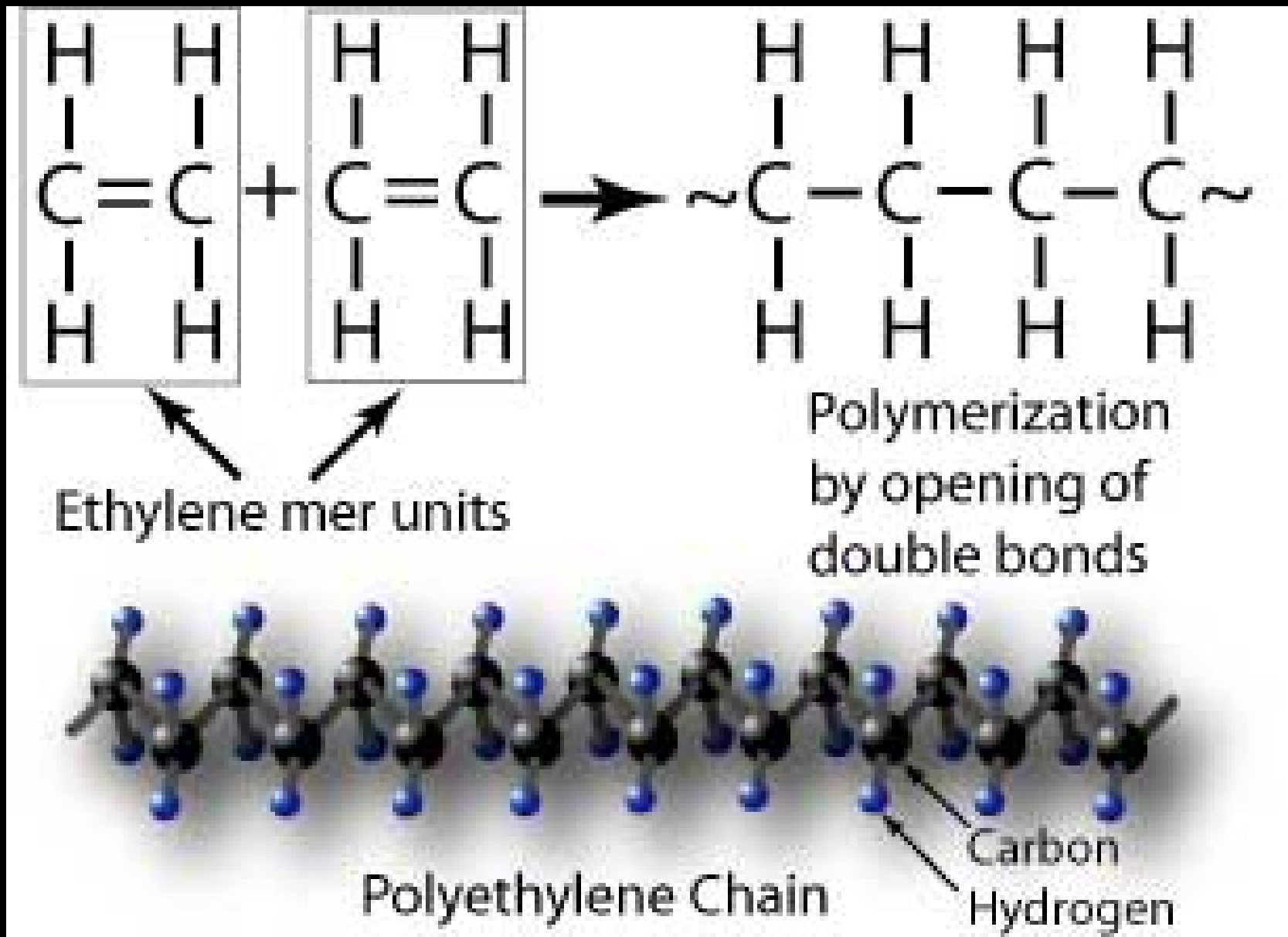
Different Monomers



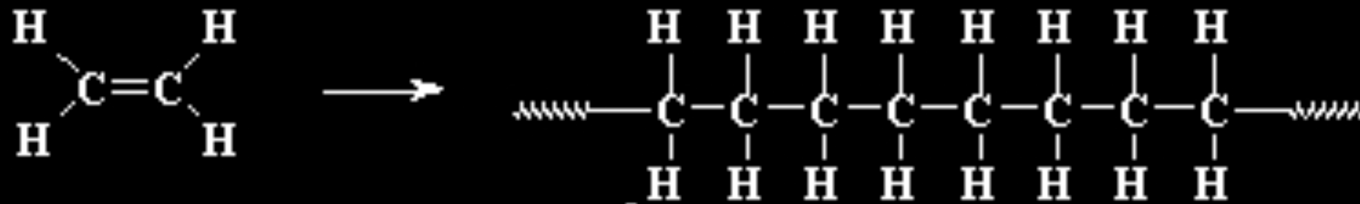
Plastics

C-C backbone				Heteroatoms in backbone	
PE	PP	PS	PVC	PET	PU
					
29.6	18.9	7.1	10.4	6.9	7.4
fraction of total European demand [%]					

ethene → polyethene of PE



ethene → polyethene or PE



This can get tedious to draw, so we often use shorthand like this.

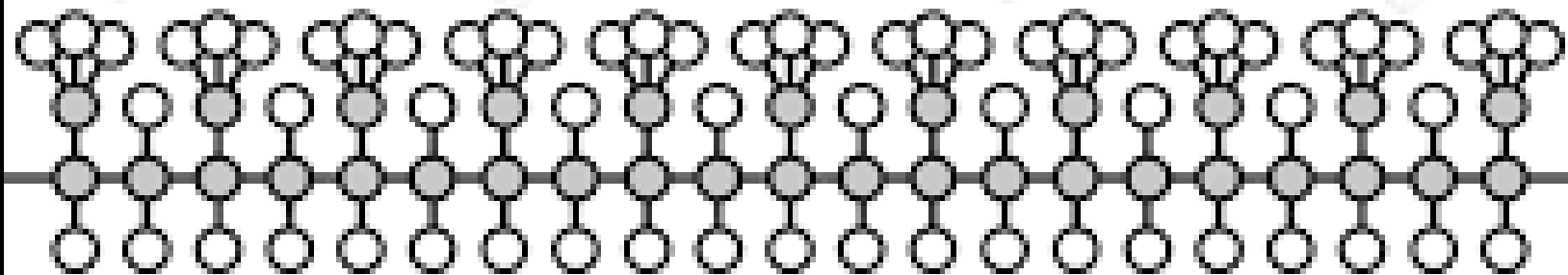
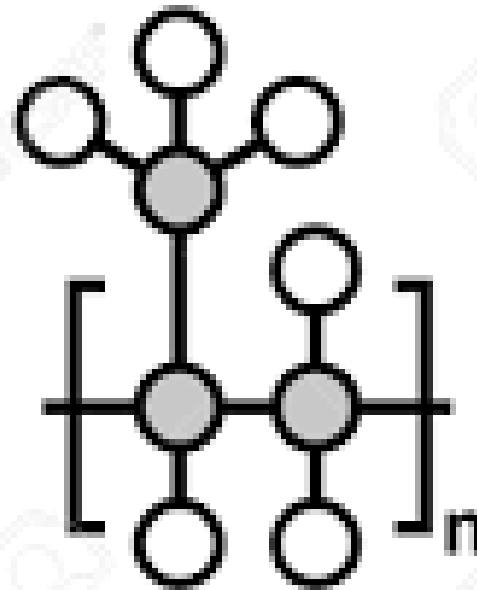
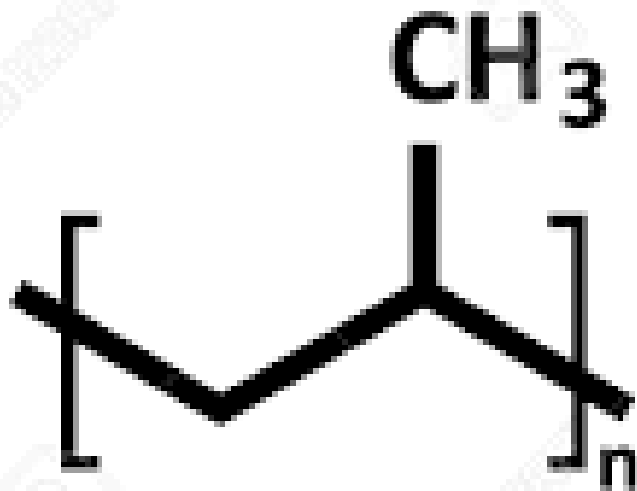
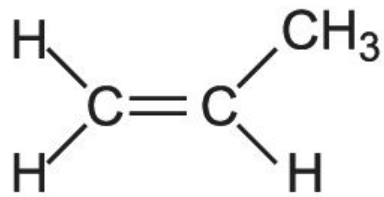


(Note: A line drawn between two atoms represents a pair of electrons shared by those atoms, which constitutes a chemical bond. Two lines represent two pairs of shared electrons, a double bond.)

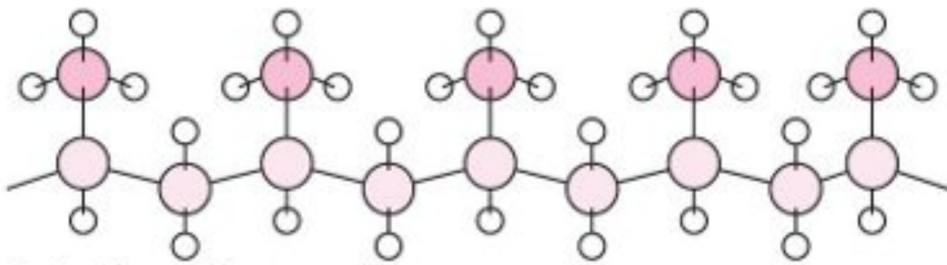
And when we're feeling really lazy we just draw it like this:



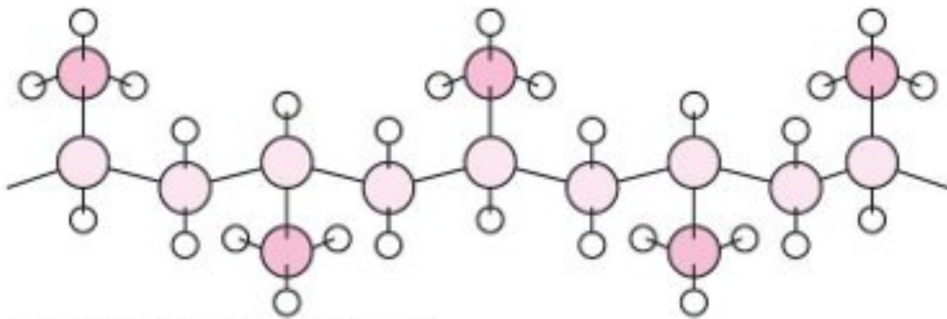
propeen → polypropyleen



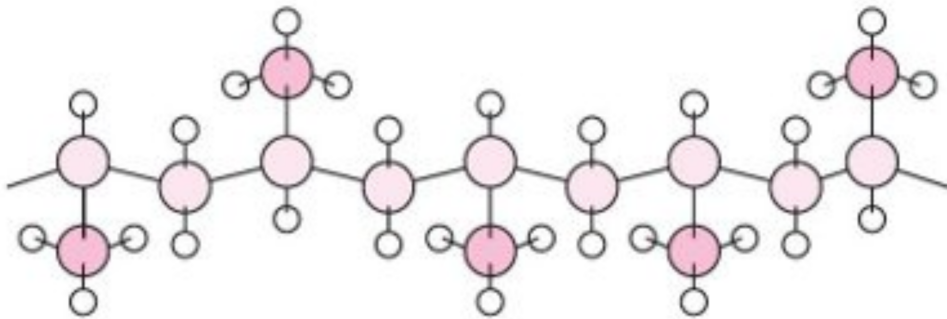
propeen → polypropyleen



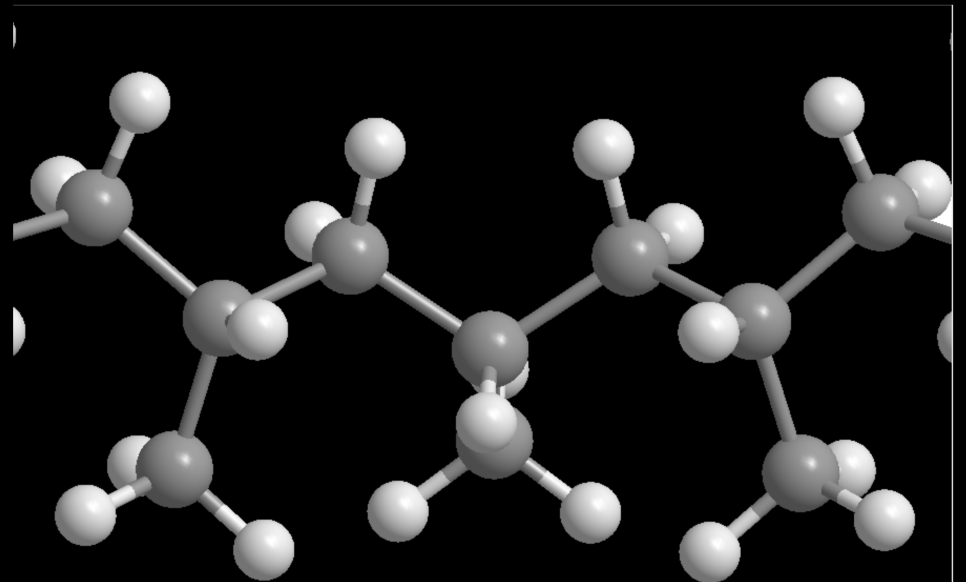
isotactic poly(propene)



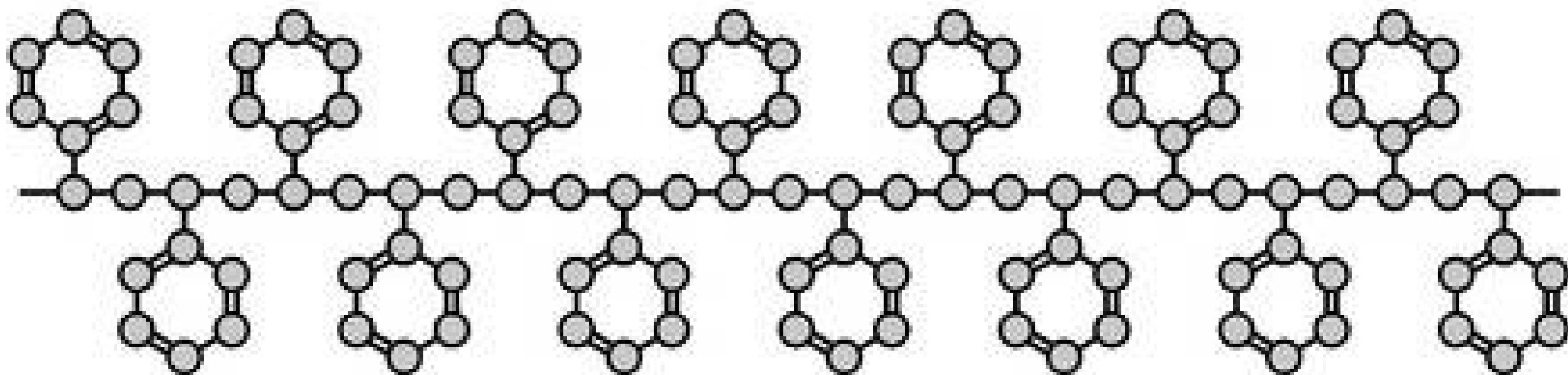
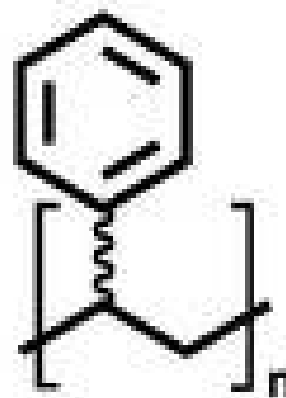
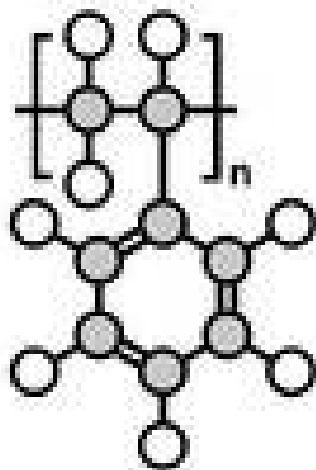
syndiotactic poly(propene)



atactic poly(propene)



styreen $\rightarrow$ polystyreen



PET of polyethyleentereftalaat

