

Monomer – Polymer card game

How to set up

Make enough sets of the cards to give one set for every two or three students in the class. Laminating the cards makes them last longer.

What to do

Divide the students into pairs or small groups and give each group a set of cards. Students lay all the cards face down on the table and take it in turns to pick up two cards. If a player picks up a 'pair' – ie a polymer card and the card showing the monomer that can be used to make that polymer – then they keep the cards. Otherwise, they put them down and the next player has a turn. Picture cards have also been included to encourage students to make links between monomers, polymers and objects made from polymers.

How to use this activity

This activity could be used as a plenary after a teaching session on monomers and polymers.

Time

5–10 minutes, depending on the ability of the students.

IUPAC names

Styrene – phenylethene

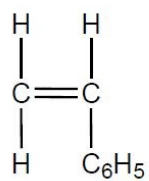
Vinyl acetate – ethoxyethene

Teflon – polytetrafluoroethene

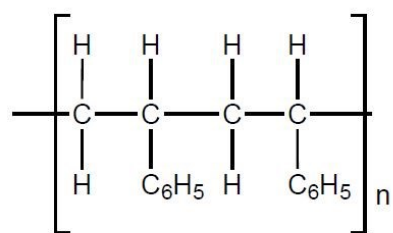
Monomer – Polymer card game: more difficult version

A more difficult version of the above card game is given where the polymers are not named to encourage the students to look carefully at the polymer structures. Picture cards of the polymers have also been included; the students can link monomers, polymers and objects made from polymers.

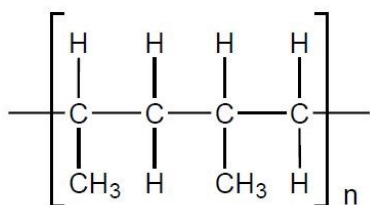
Monomer – Polymer card game



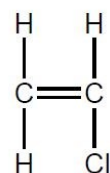
Styrene



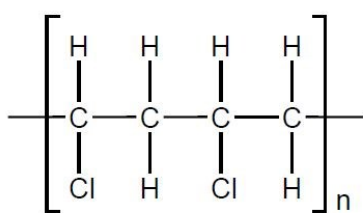
Polystyrene



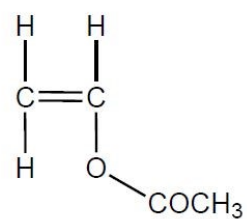
Polypropene



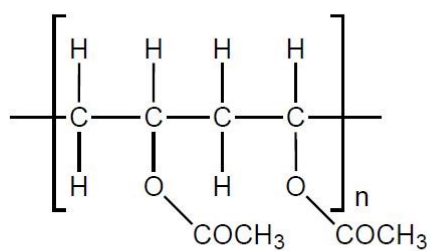
Vinyl chloride
(chloroethene)



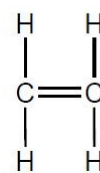
Polyvinyl chloride
(pvc)



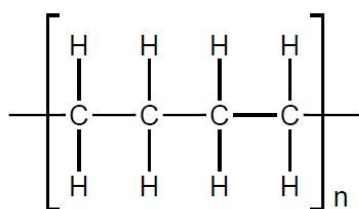
Vinyl acetate



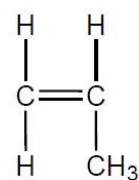
Polyvinyl acetate
(pva)



Ethene



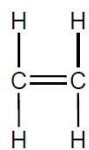
Polythene
(poly(ethene))



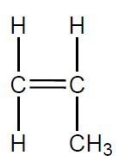
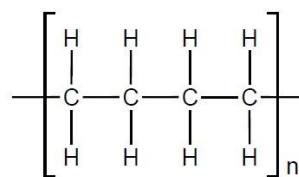
Propene



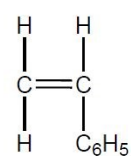
Monomer – Polymer card game: more difficult version



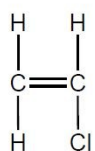
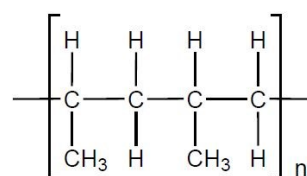
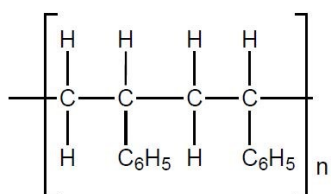
Ethene



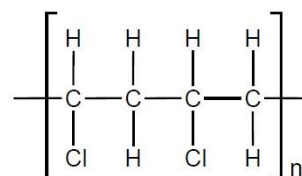
Propene

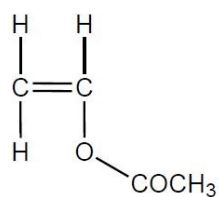


Styrene

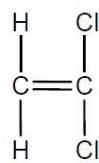


Vinyl chloride
(chloroethene)

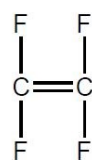
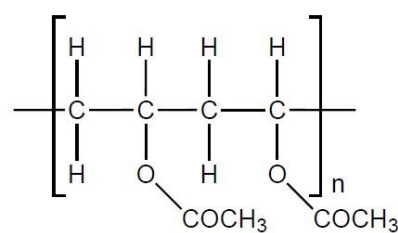
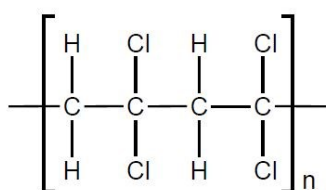




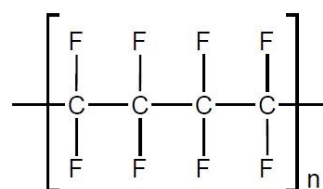
Vinyl acetate
(ethenyl ethanoate)



Vinylidenechloride
(dichloroethene)



Tetrafluoroethylene
(tetrafluoroethene)



Teflon

