



*Answer all the questions below then check your answers*

1. *Which monomer is used to produce poly(ethene)?*
  - a) *Propene*
  - b) *Ethene*
  - c) *Chloroethene*
  - d) *Tetrafluoroethene*
  
2. *What is the main use of poly(tetrafluoroethene) (PTFE)?*
  - a) *Packaging material*
  - b) *Electrical insulation*
  - c) *Non-stick coatings for cookware*
  - d) *Bottles and containers*
  
3. *Which polymer is commonly used for making pipes and window frames?*
  - a) *Poly(ethene)*
  - b) *Poly(chloroethene)*
  - c) *Poly(propene)*
  - d) *Poly(tetrafluoroethene)*

4. Which of the following is NOT an addition polymer?

- a) Poly(ethene) (PE)
- b) Poly(vinyl chloride) (PVC)
- c) Poly(tetrafluoroethene) (PTFE)
- d) Nylon

5. Match the polymer with its corresponding monomer:

Polymer	Monomer
Poly(ethene)	A) Propene
Poly(chloroethene)	B) Ethene
Poly(tetrafluoroethene)	C) Tetrafluoroethene
Poly(propene)	D) Chloroethene

6. Fill the gap to complete the sentences below:

- a. Poly(ethene) is formed by the addition polymerization of \_\_\_\_\_.
- b. Poly(chloroethene), also known as \_\_\_\_\_, is used for making pipes and window frames.
- c. The monomer for poly(propene) is \_\_\_\_\_.
- d. The repeating unit of poly(tetrafluoroethene) contains the very reactive halogen \_\_\_\_\_ in its structure.

- e. The full name of the polymer made from the monomer of PTFE is  
\_\_\_\_\_.
7. Describe the process of addition polymerization and provide the general equation for the formation of poly(ethene).
8. Write the chemical equation for the formation of poly(chloroethene) (PVC) from its monomer.
9. List two uses of poly(propene) and explain why it is suitable for these uses.

## Answers

1. Which monomer is used to produce poly(ethene)?

- a) Propene
- b) Ethene
- c) Chloroethene
- d) Tetrafluoroethene

Answer: b) Ethene

2. What is the main use of poly(tetrafluoroethene) (PTFE)?

- a) Packaging material
- b) Electrical insulation
- c) Non-stick coatings for cookware
- d) Bottles and containers

Answer: c) Non-stick coatings for cookware

3. Which polymer is commonly used for making pipes and window frames?

- a) Poly(ethene)
- b) Poly(chloroethene)
- c) Poly(propene)
- d) Poly(tetrafluoroethene)

Answer: b) Poly(chloroethene)

4. Which of the following is NOT an addition polymer?

- a) Poly(ethene) (PE)
- b) Poly(vinyl chloride) (PVC)
- c) Poly(tetrafluoroethene) (PTFE)
- d) Nylon

Answer: d) nylon, nylon is a condensation polymer.

5. Match the polymer with its corresponding monomer:

Polymer	Monomer
Poly(ethene)	A) Propene
Poly(chloroethene)	B) Ethene
Poly(tetrafluoroethene)	C) Tetrafluoroethene
Poly(propene)	D) Chloroethene

6. Fill the gap to complete the sentences below:

a. Poly(ethene) is formed by the addition polymerization of \_\_\_\_\_.

Answer: ethene

b. Poly(chloroethene), also known as \_\_\_\_\_, is used for making pipes and window frames.

Answer: PVC (Polyvinyl chloride)

c. The monomer for poly(propene) is \_\_\_\_\_.

Answer: propene

d. The repeating unit of poly(tetrafluoroethene) contains the very reactive halogen \_\_\_\_\_ in its structure.

Answer: fluorine

e. The full name of the polymer made from the monomer of PTFE is

\_\_\_\_\_.

Answer: Tetrafluoroethene

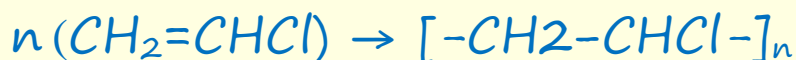
7. Describe the process of addition polymerization and provide the general equation for the formation of poly(ethene).

Addition polymerisation is a chemical reaction where monomers add together without the loss of any atoms to form a polymer. For poly(ethene), the monomer ethene undergoes polymerisation to form poly(ethene). The general equation is:



8. Write the chemical equation for the formation of poly(chloroethene) (PVC) from its monomer.

Answer:



9. List two uses of poly(propene) and explain why it is suitable for these uses.

Answer: Two uses of poly(propene) are:

Packaging materials: Poly(propene) is strong and resistant to many chemicals, making it ideal for packaging.

Textiles (e.g., ropes and carpets): Its flexibility and durability make it suitable for producing various textile products.