

Unit 14 Materials of the modern world

A Multiple-choice questions

1. D
2. D
3. B
4. C
5. B
6. C
7. B
8. D
9. B
10. A

B True or false questions

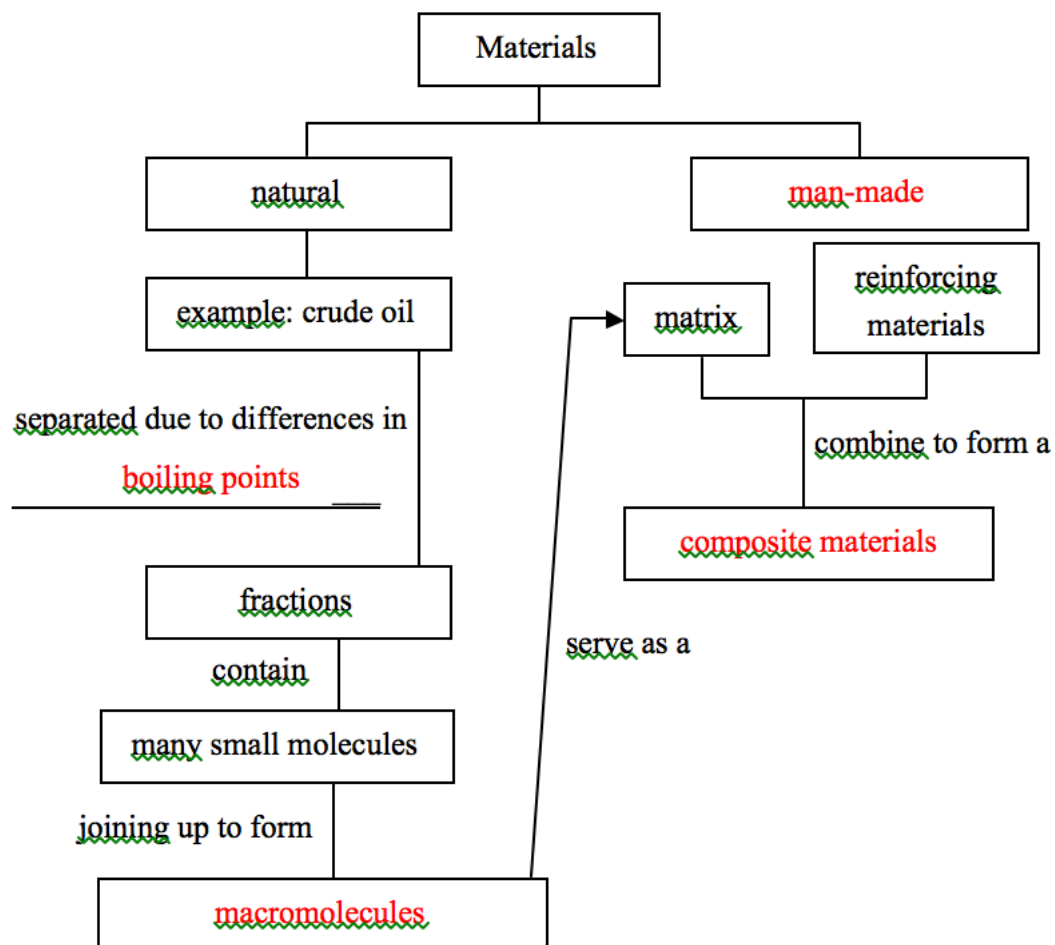
1. F
2. F
3. F
4. T
5. F

C Fill-in-the-blanks

1. natural, man-made
2. mixture, boiling points
3. insulators
4. biodegradable
5. reinforcing materials

D Short questions

1.



2. The truck using diesel.

It is because among the two fractions of crude oil, the molecular size of diesel is larger. Thus the boiling point of diesel is higher and it is more difficult to be burnt. Incomplete burning will lead to the release of larger amount of smoke.

3. Advantage: Plastics are lighter than metals. / The production cost of plastics is lower than that of metals. / Plastics are resistant to corrosion by acids and alkalis. (any ONE or other reasonable answers)

Disadvantage: Plastic wastes do not decompose easily in Nature. Thus it takes up a lot of space in landfill sites. / Incineration of plastic wastes can result in air pollution. (any ONE or other reasonable answers)

4. Bring your own bag when shopping.

Reuse the plastic bags.

Do not ask for unnecessary plastic bags when shopping.

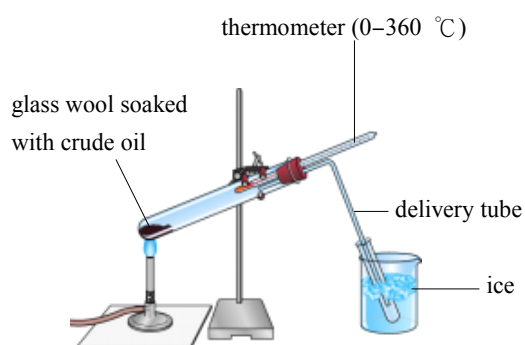
(or other reasonable answers)

5. No. It is because there is only fibres without another material which serves as the reinforcing material.

E Long questions

1.
 - a Remains of sea plants and animals were buried by sand and mud. Under high temperature and pressure over millions of years, the remains slowly change into crude oil.
 - b Crude oil can be transported by pipelines or oil tankers.
 - c Naphtha.
 - d Chemical reaction.
 - e Physical reaction.
 - f The plastic beads are melted and then injected into a mould in the shape of a cup. After the plastic cooled down and solidified, a cup is formed.

2.
 - a Fraction D.
 - b Fraction C.
 - c C, E, A, B, D
 - d



- a (5), (1), (4), (6), (3), (2)
- b The wastes are separated according to the materials from which they are made.
- c Physical change.
- d Advantage: It gives out energy that can be used for generating electricity. / It does not waste large pieces of land for landfilling. (any ONE or other reasonable answers)
Disadvantage: It gives off toxic gases. / It causes air pollution. (any ONE or other reasonable answers)