

Name: _____ Class: _____ Date: _____

Chapter 02: Current Status of the Plastics Industry

1. A steep drop in plastics production in 2008-2009 can be attributed to the ____.

- a. World Trade Center bombing
- b. financial crisis that started in 2008
- c. wars in Afghanistan and Iraq
- d. demand for crude oil

ANSWER: b

2. The projections for plastics production by 2020 have been based on the growth of plastics in ____.

- a. aeronautics
- b. space travel
- c. medical technology
- d. the automotive industry

ANSWER: d

3. One of the five states that enacted bottle deposit laws in the 1970s is ____.

- a. Oregon
- b. Pennsylvania
- c. New York
- d. Texas

ANSWER: a

4. Recycling is a term generally reserved for ____.

- a. reuse of waste materials generated during manufacturing
- b. reprocessing of waste materials generated during manufacturing
- c. postconsumer waste materials
- d. incineration of waste materials

ANSWER: c

5. Why has there been so little success in bottle deposit laws?

- a. consumers have been slow to recycle
- b. major soft drink manufacturers oppose it
- c. the federal government opposes it
- d. there is great diversity in state laws concerning recycling

ANSWER: b

6. Historically, a problem with PET bottle recycling was related to the fact that ____.

- a. the FDA did not allow recycled materials to be in contact with food
- b. PET bottles has toxic materials
- c. the FDA imposed steep inspection costs on recycled PET
- d. PET bottles were an alloy of unknown substances

ANSWER: a

7. Because residents often make mistakes in sorting plastic containers, many large communities accept ____.

- a. PVC only

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- b. only HDPE plastics
- c. only nonplastics
- d. commingled materials

ANSWER: d

8. In recycling collection trucks, the greatest volume collected is ____

- a. plastics
- b. mixed paper
- c. cardboard
- d. aluminum cans

ANSWER: a

9. In a materials recovery facility (MRF), the conveyor belts that move recycled materials past employees who sort them are called ____.

- a. sorting lines
- b. magnetic sorting features
- c. picking lines
- d. baling lines

ANSWER: c

10. Natural HDPE bottles are mostly ____.

- a. clear bottles
- b. opaque bottles suitable for bleach
- c. juice containers
- d. milk jugs

ANSWER: d

11. What is the process in which a blower system separates the fine pieces out that are too light to fall through a controlled updraft?

- a. baling
- b. elutriation
- c. decanting
- d. flotation

ANSWER: b

12. Automatic sorting systems detect the chemical makeup of material, such as the ____ systems that detect opacity.

- a. single wavelength infrared (IR)
- b. multiple wavelength IR
- c. optical
- d. X-ray

ANSWER: a

13. The type of depolymerization that produces useful monomers is called ____.

- a. pyrolysis

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- b. decomposition
- c. hydrolysis
- d. liquefaction

ANSWER: c

14. What is an advantage of incineration?

- a. it is environmentally friendly
- b. it is very economical
- c. it provides an 10% to 20% reduction in the volume of the solid waste
- d. it does not require sorting of the solid wastes

ANSWER: d

15. Polymer materials that derive from renewable resources, such as corn rather than petroleum-based plastics are known as ____.

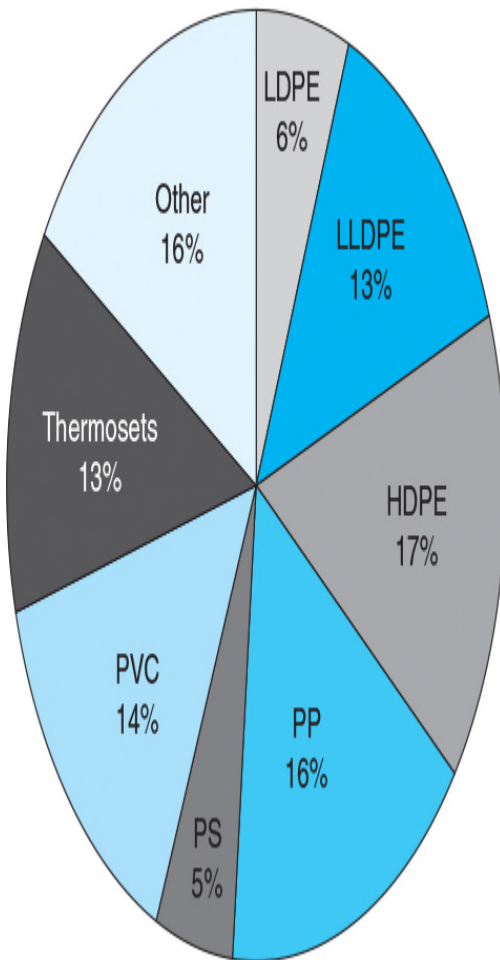
- a. degradable plastics
- b. bioplastics
- c. biodegradable plastics
- d. hydrolyzed plastics

ANSWER: b

16. This pie chart shows that ____ represents the highest percentage of production.

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Distribution of US Production



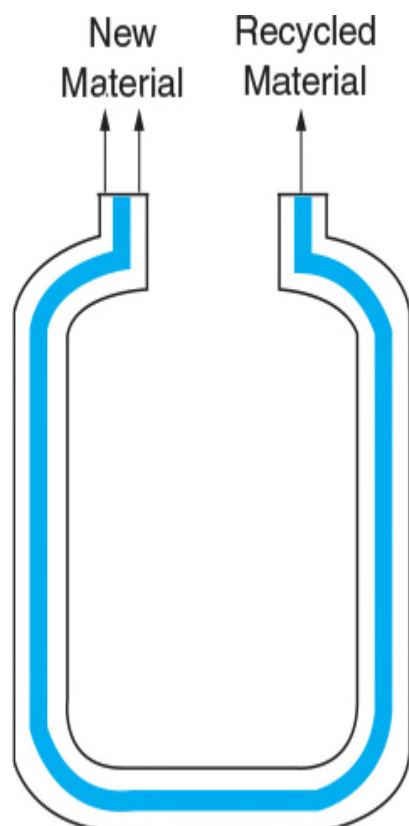
- a. low-density polyethylene
- b. polyvinyl chloride
- c. high-density polyethylene
- d. polystyrene

ANSWER: c

17. This figure shows an early idea to remedy the problem of the FDA not allowing the use of _____ in food contact applications.

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- a. PVS
- b. HDPE
- c. plastics
- d. recycled materials

ANSWER: d