

Table of Contents

Ch01	2
Ch02	5
Ch03	8
Ch04	11
Ch05	14
Ch06	17
Ch07	20
Ch08	23
Ch09	26
Ch10	29
Ch11	32
Ch12	35
Ch13	38
Ch14	41
Ch15	44
Ch16	47
Ch17	50
Ch18	53
Ch19	56
Ch20	59
Ch21	62
Ch22	65
Ch23	68
Ch24	71
Ch25	74
Ch26	77
Ch27	80
Ch28	83
Ch29	86
Ch30	89
Ch31	92
Ch32	95
Ch33	98
Ch34	101
Ch35	104
Ch36	107

Multiple Choice

1. Which of the following is NOT an example of a dental material?

- A. Amalgam filling
- B. Porcelain crown
- C. Full maxillary denture
- D. Fluoride varnish

Answer: D

Subject: Chapter 01: Introduction

2. The most reliable source of information about a dental product comes from:

- A. Manufacturer's data
- B. Clinical trials
- C. Package inserts
- D. Hands-on experience

Answer: B

Subject: Chapter 01: Introduction

3. The Council on Scientific Affairs, which develops standards for dental products, operates under the guidance of which organization?

- A. ANSI
- B. ADA
- C. DMD
- D. ADSI

Answer: A

Subject: Chapter 01: Introduction

4. The ADA Seal of Acceptance is issued to a product that follows ADA guidelines for a period of how many years?

- A. 5 years
- B. 3 years
- C. 6 years
- D. Lifetime

Answer: B

Subject: Chapter 01: Introduction

5. An example of a Class II medical device is:

- A. Composite restorative material
- B. A toothbrush
- C. Bone graft material
- D. Prophylaxis paste

Answer: A

Subject: Chapter 01: Introduction

6. Dental materials that are tooth colored are called _____ materials?

- A. Hygienic
- B. Esthetic
- C. Prosthetic
- D. Cosmetic

Answer: B

Subject: Chapter 01: Introduction

7. A dental material that is classified by longevity of use includes all of the following EXCEPT:

- A. Temporary restoration
- B. Permanent restoration
- C. Partial restoration
- D. Interim restoration

Answer: C

Subject: Chapter 01: Introduction

8. Dental caries involving the area just below the interproximal contact is referred to as:

- A. Class III
- B. Class I
- C. Class V
- D. Class II

Answer: D

Subject: Chapter 01: Introduction

9. Class _____ lesions involve the cusp tip or incisal edge of a tooth (and were not part of Black's original classifications).

- A. I
- B. III
- C. VI
- D. V

Answer: C

Subject: Chapter 01: Introduction

10. Class _____ restorations are often placed as a result of trauma and involve the incisal angle of an anterior tooth.

- A. IV
- B. III
- C. VI
- D. II

Answer: A

Subject: Chapter 01: Introduction

Multiple Choice

1. Which of the following areas is not a physical science that contributes to the field of materials science?

- A. Chemistry
- B. Physics
- C. Physiology
- D. Engineering

Answer: C

Subject: Chapter 02: Materials Science and Dentistry

2. The phase of matter with the weakest atomic bond strength is:

- A. Liquid
- B. Solid
- C. Colloid
- D. Gas

Answer: D

Subject: Chapter 02: Materials Science and Dentistry

3. The type of primary bond that is the result of an electron being given up by one atom and accepted by another is a(n) _____?

- A. Ionic bond
- B. Covalent bond
- C. van der Waals force
- D. Secondary bond

Answer: A

Subject: Chapter 02: Materials Science and Dentistry

4. Which of the following is not an example of a secondary bond?

- A. van der Waals forces
- B. Permanent dipoles
- C. Hydrogen bonds
- D. Covalent bonds

Answer: D

Subject: Chapter 02: Materials Science and Dentistry

5. _____ bonding is a special case example of a permanent dipole that results in a bond that is stronger than other secondary bonds.

- A. Hydrogen
- B. Fluctuating dipole
- C. Ionic
- D. van der Waals forces

Answer: A

Subject: Chapter 02: Materials Science and Dentistry

6. When one atom in a covalent bond pulls the electron toward it more strongly, this is referred to as a:

- A. Hydrogen bond
- B. Permanent dipole
- C. Ionic bond
- D. Metallic bond

Answer: B

Subject: Chapter 02: Materials Science and Dentistry

7. The bond type where the electrons are shared by ALL of the atoms instead of by just two atoms is:

- A. Ionic bond
- B. Covalent bond
- C. Metallic bond
- D. Hydrogen bond

Answer: C

Subject: Chapter 02: Materials Science and Dentistry

8. The material that is held together by ionic bonds is strong when compressed and brittle when bent is:

- A. Plastic
- B. Composite
- C. Metal
- D. Ceramic

Answer: D

Subject: Chapter 02: Materials Science and Dentistry

9. _____ are materials that are composed of chains of covalently bonded repeating units.
- A. Ceramics
 - B. Metals
 - C. Plastics
 - D. Composites

Answer: C

Subject: Chapter 02: Materials Science and Dentistry

10. This strong, lightweight material is made of two or more different materials.
- A. Composites
 - B. Plastics
 - C. Metals
 - D. Ceramics

Answer: A

Subject: Chapter 02: Materials Science and Dentistry