

Question 1 of 20

**Calcification of the primary teeth begins in utero from \_\_ weeks postfertilization.**

10 to 12

Calcification begins 13 to 16 weeks in utero. By 18 to 20 weeks, all primary teeth have begun to calcify.



**13 to 16**

Calcification begins 13 to 16 weeks in utero. By 18 to 20 weeks, all primary teeth have begun to calcify.

16 to 18

Calcification begins 13 to 16 weeks in utero. By 18 to 20 weeks, all primary teeth have begun to calcify.

18 to 20

Calcification begins 13 to 16 weeks in utero. By 18 to 20 weeks, all primary teeth have begun to calcify.

Question 2 of 20

## Which of the following teeth is not considered a succedaneous tooth (Universal system)?

24

The permanent incisors, canines and premolars are considered succedaneous teeth because they take the place of their primary predecessors. Permanent molars do not replace any other teeth.



19

The permanent incisors, canines and premolars are considered succedaneous teeth because they take the place of their primary predecessors. Permanent molars do not replace any other teeth.

28

The permanent incisors, canines and premolars are considered succedaneous teeth because they take the place of their primary predecessors. Permanent molars do not replace any other teeth.

11

The permanent incisors, canines and premolars are considered succedaneous teeth because they take the place of their primary predecessors. Permanent molars do not replace any other teeth.

**Statement 1: Continued formation of the tooth root is considered to be an active factor in moving the crown toward its final position in the mouth during eruption. Statement 2: Root formation is completed once the tooth emerges and is in functional use.**

Statement 1 and 2 are true as written.

It is considered true that root formation helps drive the eruption process. However, root formation is not finished when the tooth emerges. Formation of root dentin and cementum continues after the tooth is in use.



**Statement 1 is true while Statement 2 is false as written.**

It is considered true that root formation helps drive the eruption process. However, root formation is not finished when the tooth emerges. Formation of root dentin and cementum continues after the tooth is in use.

Statement 1 is false while Statement 2 is true as written.

It is considered true that root formation helps drive the eruption process. However, root formation is not finished when the tooth emerges. Formation of root dentin and cementum continues after the tooth is in use.

Statement 1 and 2 are false as written.

It is considered true that root formation helps drive the eruption process. However, root formation is not finished when the tooth emerges. Formation of root dentin and cementum continues after the tooth is in use.

**Statement 1: The normal permanent dentition consists of 32 teeth. Statement 2: Completion of the development of the permanent teeth usually occurs between 18 to 25 years of age.**



Statement 1 and 2 are true as written.

If the third molars are included in the discussion, the above two statements are correct.

Statement 1 is true while Statement 2 is false as written.

If the third molars are included in the discussion, the above two statements are correct.

Statement 1 is false while Statement 2 is true as written.

If the third molars are included in the discussion, the above two statements are correct.

Statement 1 and 2 are false as written.

If the third molars are included in the discussion, the above two statements are correct.

Question 5 of 20

**Which of the following best represents the order of emergence of permanent teeth from earliest to latest eruption (Universal system of numbering)?**



19, 8, 5, 11

According to the normal chronology, #19 erupts at 6 to 7 yrs, #8 erupts at 7 to 8 yrs, #5 erupts at 10 to 11 yrs, and #11 erupts at 11 to 12 yrs.

8, 19, 5, 11

According to the normal chronology, #19 erupts at 6 to 7 yrs, #8 erupts at 7 to 8 yrs, #5 erupts at 10 to 11 yrs, and #11 erupts at 11 to 12 yrs.

8, 5, 19, 11

According to the normal chronology, #19 erupts at 6 to 7 yrs, #8 erupts at 7 to 8 yrs, #5 erupts at 10 to 11 yrs, and #11 erupts at 11 to 12 yrs.

19, 5, 11, 8

According to the normal chronology, #19 erupts at 6 to 7 yrs, #8 erupts at 7 to 8 yrs, #5 erupts at 10 to 11 yrs, and #11 erupts at 11 to 12 yrs.

#### Question 6 of 20

**Which of the following mean ages (in months) best represents when the primary maxillary canines begin eruption?**

10

Based on the chronology of primary teeth, maxillary canines tend to erupt around 19 months of age. See table 2-1.

16

Based on the chronology of primary teeth, maxillary canines tend to erupt around 19 months of age. See table 2-1.



19

Based on the chronology of primary teeth, maxillary canines tend to erupt around 19 months of age. See table 2-1.

29

Based on the chronology of primary teeth, maxillary canines tend to erupt around 19 months of age. See table 2-1.

Question 7 of 20

**The dental pulp's primary function is the formation of which of the following?**

Enamel

Dental pulp primarily forms dentin. Enamel, cementum, and the periodontal ligament are formed by other embryological structures.



**Dentin**

Dental pulp primarily forms dentin. Enamel, cementum, and the periodontal ligament are formed by other embryological structures.

Cementum

Dental pulp primarily forms dentin. Enamel, cementum, and the periodontal ligament are formed by other embryological structures.

Periodontal Ligament

Dental pulp primarily forms dentin. Enamel, cementum, and the periodontal ligament are formed by other embryological structures.

Question 8 of 20

**The follicles of the developing incisors and canines are in a position labial to the deciduous roots.**

True

The follicles of the developing incisors and canines are in a position lingual to the deciduous roots.



False

The follicles of the developing incisors and canines are in a position lingual to the deciduous roots.

Question 9 of 20

**Because of attrition that occurs with age, estimation of chronological age is more precise in adults as compared to children.**

True

The estimation of adult age is at best plus or minus 5 years. Juvenile estimation is considered more precise. For example, during the mixed dentition stage, age may be assessed based on

which teeth have erupted, the amount of resorption of the roots of primary teeth, and the degree to which the permanent teeth are developed.



**False**

The estimation of adult age is at best plus or minus 5 years. Juvenile estimation is considered more precise. For example, during the mixed dentition stage, age may be assessed based on which teeth have erupted, the amount of resorption of the roots of primary teeth, and the degree to which the permanent teeth are developed.

#### Question 10 of 20

**Which of the following best represents the order of emergence of primary teeth from earliest to latest eruption (Universal system of numbering)?**

C, B, D, E

According to the chronology of tooth eruption, the order goes central incisors, lateral incisors, first molars, canines, second molars.

A, F, G, I

According to the chronology of tooth eruption, the order goes central incisors, lateral incisors, first molars, canines, second molars.



**F, G, I, J**

According to the chronology of tooth eruption, the order goes central incisors, lateral incisors, first molars, canines, second molars.

B, C, A, E

According to the chronology of tooth eruption, the order goes central incisors, lateral incisors, first molars, canines, second molars.

Question 11 of 20

**Which of the following permanent teeth will most likely begin eruption first (Universal system)?**

4

Maxillary first premolars tend to erupt between 10 to 11 years old, second premolars between 10 to 12 years, canines between 11 to 12 years, and second molars between 12 to 13 years of age.



5

Maxillary first premolars tend to erupt between 10 to 11 years old, second premolars between 10 to 12 years, canines between 11 to 12 years, and second molars between 12 to 13 years of age.

6

Maxillary first premolars tend to erupt between 10 to 11 years old, second premolars between 10 to 12 years, canines between 11 to 12 years, and second molars between 12 to 13 years of age.

15

Maxillary first premolars tend to erupt between 10 to 11 years old, second premolars between 10 to 12 years, canines between 11 to 12 years, and second molars between 12 to 13 years of age.

Question 12 of 20

**Which of the following structures is not a component of the dental pulp?**

Nerves

The dental pulp is a connective tissue composed of arteries, veins, a lymphatic system, and nerves. Its primary function is to form dentin; however, it is not composed of dentin.

Arteries

The dental pulp is a connective tissue composed of arteries, veins, a lymphatic system, and nerves. Its primary function is to form dentin; however, it is not composed of dentin.



**Dentin**

The dental pulp is a connective tissue composed of arteries, veins, a lymphatic system, and nerves. Its primary function is to form dentin; however, it is not composed of dentin.

Veins

The dental pulp is a connective tissue composed of arteries, veins, a lymphatic system, and nerves. Its primary function is to form dentin; however, it is not composed of dentin.

Question 13 of 20

**Passage of a primary tooth crown through the alveolar gingiva occurs when approximately what fraction of the tooth root is developed?**



**3/4**

Passage of the crown through the alveolar crest occurs when about 2/3 of the root is formed. When 3/4 of the root is formed, the crown emerges through the alveolar gingiva.

2/3

Passage of the crown through the alveolar crest occurs when about 2/3 of the root is formed. When 3/4 of the root is formed, the crown emerges through the alveolar gingiva.

1/2

Passage of the crown through the alveolar crest occurs when about 2/3 of the root is formed. When 3/4 of the root is formed, the crown emerges through the alveolar gingiva.

1/4

Passage of the crown through the alveolar crest occurs when about 2/3 of the root is formed. When 3/4 of the root is formed, the crown emerges through the alveolar gingiva.

**Which of the following structures is the cause for resorption of the primary tooth roots leading to exfoliation?**

Permanent successor enamel

The dental follicle of the permanent successor tooth is responsible for resorption of the primary tooth root.

Permanent successor dentin

The dental follicle of the permanent successor tooth is responsible for resorption of the primary tooth root.



**Permanent successor follicle**

The dental follicle of the permanent successor tooth is responsible for resorption of the primary tooth root.

No structure because it is a spontaneous process

The dental follicle of the permanent successor tooth is responsible for resorption of the primary tooth root.

Question 15 of 20

**Which of the following permanent teeth tend to show evidence of calcification at birth?**

Central incisors

The maxillary and mandibular first molars begin calcification at birth. Central incisors, canines, and second molars begin calcification at 3 to 4 months, 4 to 5 months, and 2.5 to 3 years, respectively.

#### Canines

The maxillary and mandibular first molars begin calcification at birth. Central incisors, canines, and second molars begin calcification at 3 to 4 months, 4 to 5 months, and 2.5 to 3 years, respectively.



#### First molar

The maxillary and mandibular first molars begin calcification at birth. Central incisors, canines, and second molars begin calcification at 3 to 4 months, 4 to 5 months, and 2.5 to 3 years, respectively.

#### Second molar

The maxillary and mandibular first molars begin calcification at birth. Central incisors, canines, and second molars begin calcification at 3 to 4 months, 4 to 5 months, and 2.5 to 3 years, respectively.

**Statement 1: Groups of teeth develop at specific rates so that the sequence of eruption and emergence of the primary teeth is well defined with few deviations. Statement 2: For the individual child, considerable variation in the times of emergence of the primary dentition may occur.**



**Statement 1 and 2 are true as written.**

Both of these statements are correct. Over a large distribution, a well-defined eruption pattern is known. However, each individual child may differ greatly from the norm.

Statement 1 is true while Statement 2 is false as written.

Both of these statements are correct. Over a large distribution, a well-defined eruption pattern is known. However, each individual child may differ greatly from the norm.

Statement 1 is false while Statement 2 is true as written.

Both of these statements are correct. Over a large distribution, a well-defined eruption pattern is known. However, each individual child may differ greatly from the norm.

Statement 1 and 2 are false as written.

Both of these statements are correct. Over a large distribution, a well-defined eruption pattern is known. However, each individual child may differ greatly from the norm.

## The cements enamel junction (CEJ) has all but which of the following as potential junctional schemes?

Enamel overlapping cementum

There are four junctional schemes of the CEJ: Enamel overlapping cementum, cementum overlapping enamel, end to end, and the absence of connecting enamel and cementum so that dentin is an external surface of the root. Dentin cannot overlay either enamel or cementum.

End to end

There are four junctional schemes of the CEJ: Enamel overlapping cementum, cementum overlapping enamel, end to end, and the absence of connecting enamel and cementum so that dentin is an external surface of the root. Dentin cannot overlay either enamel or cementum.

Cementum overlapping enamel

There are four junctional schemes of the CEJ: Enamel overlapping cementum, cementum overlapping enamel, end to end, and the absence of connecting enamel and cementum so that dentin is an external surface of the root. Dentin cannot overlay either enamel or cementum.



**Dentin overlapping enamel and cementum**

There are four junctional schemes of the CEJ: Enamel overlapping cementum, cementum overlapping enamel, end to end, and the absence of connecting enamel and cementum so that dentin is an external surface of the root. Dentin cannot overlay either enamel or cementum.

**The normal age range of the primary dentition from complete formation to complete loss is which of the following?**

1 to 7 years

Primary dentition is usually completed by age 3 and functions for a relatively short time before it is lost completely by about age 11.

1 to 11 years

Primary dentition is usually completed by age 3 and functions for a relatively short time before it is lost completely by about age 11.

3 to 7 years

Primary dentition is usually completed by age 3 and functions for a relatively short time before it is lost completely by about age 11.



**3 to 11 years**

Primary dentition is usually completed by age 3 and functions for a relatively short time before it is lost completely by about age 11.

Question 19 of 20

**Which of the following age ranges best represents the mixed dentition period?**

5 to 13 years

The mixed dentition period begins with the emergence and eruption of the mandibular first permanent molar at about 6 years of age. It ends with the loss of the last primary tooth, which usually occurs at about 11 to 12 years of age.

6 to 13 years

The mixed dentition period begins with the emergence and eruption of the mandibular first permanent molar at about 6 years of age. It ends with the loss of the last primary tooth, which usually occurs at about 11 to 12 years of age.

5 to 11 years

The mixed dentition period begins with the emergence and eruption of the mandibular first permanent molar at about 6 years of age. It ends with the loss of the last primary tooth, which usually occurs at about 11 to 12 years of age.



6 to 11 years

The mixed dentition period begins with the emergence and eruption of the mandibular first permanent molar at about 6 years of age. It ends with the loss of the last primary tooth, which usually occurs at about 11 to 12 years of age.

Question 20 of 20

**Which of the following is not an important factor in the initiation and development of an abnormal occlusion?**

Premature loss of primary teeth

An abnormal occlusion often results from premature loss or retention of primary teeth, congenital absence of teeth, dental anomalies, or insufficient space. A normal sequenced loss of primary teeth tends to lead towards development of a normal occlusal scheme.

#### Retention of primary teeth

An abnormal occlusion often results from premature loss or retention of primary teeth, congenital absence of teeth, dental anomalies, or insufficient space. A normal sequenced loss of primary teeth tends to lead towards development of a normal occlusal scheme.

#### Insufficient space

An abnormal occlusion often results from premature loss or retention of primary teeth, congenital absence of teeth, dental anomalies, or insufficient space. A normal sequenced loss of primary teeth tends to lead towards development of a normal occlusal scheme.



#### Sequenced loss of primary teeth

An abnormal occlusion often results from premature loss or retention of primary teeth, congenital absence of teeth, dental anomalies, or insufficient space. A normal sequenced loss of primary teeth tends to lead towards development of a normal occlusal scheme.