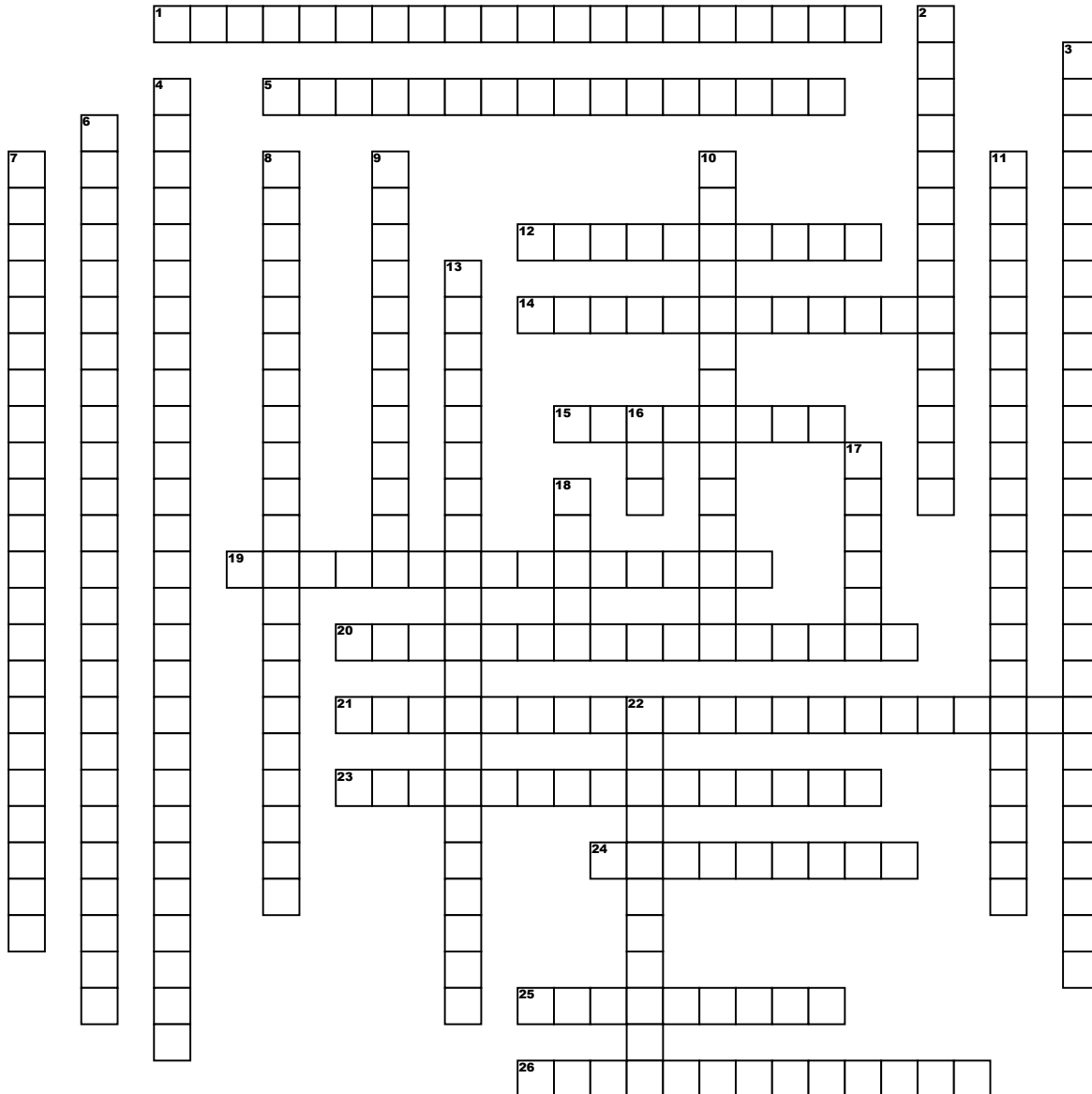


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Tooth Development



## Across

1. Which are the tooth germ tissues?
5. Can be noted in the presence of Hutchinson incisors and mulberry molars, which is caused by the teratogen of syphilis.
12. What is called the process that occurs as the single tooth germ tries unsuccessfully to divide into two tooth germs, which results in a large single rooted tooth with a common pulp cavity?
14. \_\_\_\_\_ results in either distorted root(s) or crown angulation in a formed tooth. It is caused by a distortion of HERS due to an injury or pressure; it can occur in any tooth or group of teeth during tooth development.
15. The second stage of prenatal development \_\_\_\_\_
19. Enamel hypoplasia and hypocalcification may occur together and affect entire dentitions, a common finding in \_\_\_\_\_.
20. Which is the first extra cellular matrix molecule to appear during embryonic development and separates the oral epithelium and the ectomesenchyme in the stomodeum
21. The outer cuboidal cells of the enamel organ are called \_\_\_\_\_ and will serve as a protective barrier for the rest of the enamel organ during enamel production.
23. The faulty development of dentin, can result from an interference with the metabolic processes of the odontoblasts during dentinogenesis.
24. The physiological process of \_\_\_\_\_, which is an interaction between the embryological tissue types.
25. At the beginning of the sixth week, the embryo's \_\_\_\_\_, or primitive mouth, is lined by ectoderm.

26. is known for an extensive \_\_\_\_\_ or growth of the dental lamina into buds or oval masses penetrating into the ectomesenchyme.

## Down

2. At the same time, deep to the forming oral epithelium, there is a type of mesenchyme originally from the ectoderm, the \_\_\_\_\_, which is influenced by neural crest cells that have migrated to the area.
3. In the developing tooth, what type of membrane contains several types of collagen and also laminin and fibronectin?
4. The cervical loop begins to grow deeper into the surrounding ectomesenchyme of the dental sac, elongating and moving away from the newly completed crown area to enclose more of the dental papilla tissue and form \_\_\_\_\_, which function is to shape the root(s) and induce dentin formation in the root area, so that it is continuous with coronal dentin.
6. When root dentin formation is completed, this part of the basement membrane also disintegrates, as does the entire HERS. After this disintegration of the root sheath, its cells may become the \_\_\_\_\_.
7. What is present in interactions in the morphogenesis and differentiation of developing tooth including budding of oral epithelium and condensation of neural crest cells around the bud?
8. The innermost tall columnar cells of the enamel organ are called \_\_\_\_\_ and in the future will differentiate into enamel secreting cells, ameloblasts
9. During the latter part of the seventh week, the oral epithelium grows deeper into the ectomesenchyme and is induced to produce a layer called the \_\_\_\_\_

10. The outer part of the ectoderm gives rise to \_\_\_\_\_, which consists of two horseshoe shaped bands of tissue at the surface of the stomodeum, one for each future jaw/arch.

11. Process of tooth development resulting in tooth's shape.
13. What must be completed before Cytodifferentiation can occur?
16. A basement membrane between the enamel organ and the dental papilla and is the site of the future \_\_\_\_\_.
17. The process that results from the union of two adjacent tooth germs, possibly resulting from pressure in the area, which leads to a broader, falsely macrodontic tooth similar to gemination.
18. What part of tooth forms first?
22. The interactions mediated by the basement membrane were regulated by the differentiation of which cells into odontoblasts and these molecules were elaborated at that time?