

## **7th grade District Assessment study guide.**

1. The Angle of Reflection is equal to the Angle of \_\_\_\_\_.
2. In plants, pollen tubes develop that allow sperm to reach the \_\_\_\_\_.  
Fertilization is required to produce \_\_\_\_\_.
3. Memorize the process of mitosis and how the resulting daughter cells have identical \_\_\_\_\_.
4. Many cells lack the ability to synthesize \_\_\_\_\_ molecules.
5. Asexual reproduction results in identical \_\_\_\_\_ to the single parent plant.
6. Most DNA is in the nucleus. To study the human genome, a scientist needs to obtain DNA from the \_\_\_\_\_ of cells.
7. Differentiation occurs within embryonic cells as the organism develops. Embryonic cells differentiate into cells that become \_\_\_\_\_ (fixed).
8. In plants, \_\_\_\_\_ convert sunlight into food (sugars).
9. Recessive \_\_\_\_\_ can be hidden by dominant alleles. An offspring inherits an \_\_\_\_\_ from each parent.
10. \_\_\_\_\_ produces two daughter cells that are genetically identical to the parent cell.
11. An \_\_\_\_\_ becomes the fruit of a plant.
12. Budding is a form of \_\_\_\_\_ reproduction; meiosis and fertilization do not occur. Instead, the offspring is produced directly from the parent by mitosis.
13. Baby rabbits derive about half of their genetic material from their mother (about half of the cellular DNA and \_\_\_\_\_ of the mitochondrial DNA).
14. Most of a cell's DNA is contained in the \_\_\_\_\_.
15. \_\_\_\_\_ is the bending of light as it passes from one medium to another.
16. \_\_\_\_\_ genes in a cat determine fur color, rather than a single gene.
17. The dominant trait will be expressed in a \_\_\_\_\_ individual.
18. Animal cells do not have a \_\_\_\_\_.
19. In a microscope, the greater magnification of the \_\_\_\_\_ lens will provide more detail of the specimen.
20. Only a small portion of the electromagnetic \_\_\_\_\_ is visible to humans.
21. The main function of the umbilical cord is to bring \_\_\_\_\_ from the placenta to the fetus.

22. Examining cells under a microscope could help you determine if the organism is an animal or a plant. Plant cells will have cell walls and \_\_\_\_\_.
23. In sexual reproduction, each parent contributes one set of \_\_\_\_\_ to the offspring.
24. Light travels in a straight line within a medium, such as \_\_\_\_\_.
25. If freckles are a dominant trait, one parent must be \_\_\_\_\_ if the other parent has no freckles and some of the children have no freckles. (study Punnett squares)
26. During cellular respiration, \_\_\_\_\_ release energy stored in food and produce ATP, the energy source used by cells to perform their activities.
27. All \_\_\_\_\_ cells are surrounded by cell walls, which is not true of animal cells.
28. All organisms contain (or are) cells that can \_\_\_\_\_.
29. Chromosomes are found in the nucleus and are composed of \_\_\_\_\_.

Study the function of flower plants during pollination and fruit development.

Pollen is made in the \_\_\_\_\_, both pollen and the anther are MALE structures.

Pollen needs to be transferred to the \_\_\_\_\_, which is the end of the pistil, both the \_\_\_\_\_ and the pistil are FEMALE structures.

Fruits develop from \_\_\_\_\_ and seeds develop from the \_\_\_\_\_, which are contained within the ovaries.

Pollination and \_\_\_\_\_ are required before seeds and fruit are developed.

\_\_\_\_\_ is a process of cell division (or cell reproduction), two cells with identical DNA (or chromosomes) result from each cell that undergoes \_\_\_\_\_.