

8th Grade Science Review
11/28/2004

Student Name: _____

Class: _____

Date: _____

Instructions: **Read each question carefully and circle the correct answer.**

1. All organisms are divided into kingdoms: Animal, Plant, Protist, and Fungi. What is the fifth kingdom that is recognized by scientists?

- A. Bacteria
- B. Virus
- C. Organism
- D. Monera

2. In which kingdom would you find unicellular organisms that do NOT have nuclei?

- A. Monera
- B. Plant
- C. Protista
- D. Fungi

3. Fill in the blank.

If an organism is multicellular and makes its own food, it must be a member of the _____ kingdom.

- A. Plant
- B. Protista
- C. Monera
- D. Animal

4. What do the members of the Protista kingdom have in common with the members of the Plant, Animal, and Fungi kingdoms?

- A. a root system
- B. a backbone
- C. a cell wall
- D. a true nucleus

5. What is recycling?
- A. storing something for five years or longer
 - B. throwing something away
 - C. using the materials of something over again
 - D. using small amounts of something
6. Which natural resource listed below is non-renewable?
- A. water
 - B. iron
 - C. corn
 - D. oxygen
7. Which is an act of conservation?
- A. taking your pet for a walk
 - B. burying waste in the ground
 - C. building a new house
 - D. turning off lights you don't need
8. Which natural resource listed below is renewable?
- A. trees
 - B. glass
 - C. coal
 - D. aluminum

9. Fill in the blank.

Being able to read is _____ .

- A. an inherited trait
- B. something all animals can learn
- C. a learned trait
- D. something you can only do at school

10. Fill in the blank.

In human genetics, 23 is _____.

- A. the number of genes in human cells
- B. the number of pairs of chromosomes in human cells
- C. the chromosome number that causes a child to be born with Down's syndrome
- D. the number of genes that are on a single strand of DNA

11. Fill in the blank.

Segments of DNA are called _____.

- A. mutations
- B. RNA
- C. traits
- D. genes

12. Which of the following structures comes in pairs?

- A. traits
- B. cells
- C. chromosomes
- D. RNA

13. Which of the following is determined solely by heredity?

- A. eye color
- B. artistic ability
- C. weight
- D. intelligence

14. Which chromosome combination in humans will produce a female?

- A. YY
- B. XY
- C. YX
- D. XX

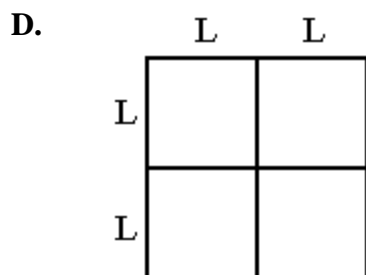
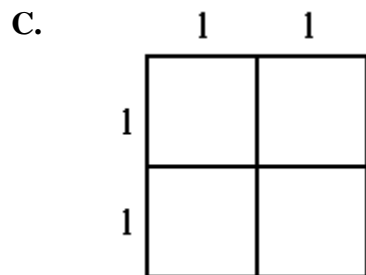
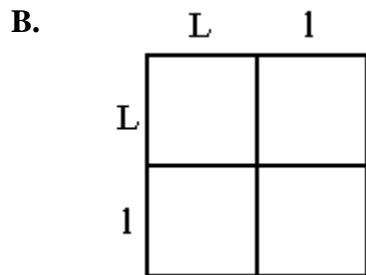
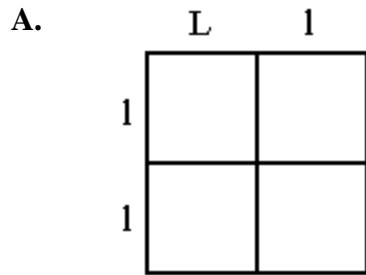
15. Use the following information to find which square indicates an offspring that will not have the ability to roll his tongue.

T = ability to roll tongue rolling
t = no ability to roll tongue rolling

	T	t
T	TT ①	Tt ②
t	Tt ③	tt ④

- A. 1
B. 2
C. 3
D. 4

16. A butterfly showing the dominant trait of long antennae was bred with a butterfly that had the recessive trait of short antennae. Which of the following is a correct Punnet square to use to determine probabilities for the offspring?



17. Fill in the blank.

An organism that reproduces without male or female gametes _____.

- A. can only reproduce once
- B. does not have enough chromosomes
- C. is asexual
- D. has a mutant disorder

18. What is required to begin sexual reproduction?

- A. spore formation
- B. seed dispersal
- C. one cell splitting into two complete cells
- D. two cells uniting to form one cell

19. Which of the following statements is true about spores?

- A. They are used by all organisms in the sexual reproduction process.
- B. They are used by some organisms to reproduce asexually.
- C. They are not part of the sexual or asexual reproduction process.

20. Which of the following is best associated with asexual reproduction?

- A. spore
- B. sperm
- C. egg
- D. seed

21. How is a fern different from a sunflower plant?

- A. The leaves of ferns do not need chlorophyll.
- B. Ferns use spores to reproduce.
- C. Ferns do not have roots.
- D. The leaves of ferns do not need water.

22. How are spores different from seeds?

- A. Spores do not contain stored food.
- B. Spores do not grow into young plants.
- C. Spores do not require water to grow.
- D. Spores do not come from plants.

23. Which of the following statements is true about non-flowering plants?

1. Some non-flowering plants reproduce asexually.
2. Some non-flowering plants reproduce using spores.
3. Some non-flowering plants reproduce using cones.

- A. 2 and 3
- B. 1, 2, and 3
- C. 1 only
- D. 2 only

24. Which of the following plants reproduce using **spores**?

1. palm trees
2. horsetails
3. ferns

- A. 1 and 2
- B. 1, 2, and 3
- C. 2 and 3
- D. 1 and 3

25. What must happen before seeds can develop?

- A. The sepals must be formed.
- B. The egg must be released from the ovary.
- C. Pollination must occur.
- D. Spore cases must appear.

26. Which female part of the flower first receives pollen?

- A. ovary
- B. sepal
- C. stigma
- D. style

27. Which male part of the flower produces pollen?

- A. filament
- B. sepal
- C. stem
- D. stamen

28. Fill in the blank.

The male parts of a flower are called the _____.

- A. pistils
- B. sepals
- C. ovules
- D. stamens

29. Which of the following plants does NOT have a vascular system?

- A. a carrot plant
- B. a hornwort
- C. a rosebush
- D. grass

30. Which of the following is a characteristic of all non-vascular plants?

- A. They are short.
- B. They reproduce asexually.
- C. They do not contain chlorophyll.
- D. They have extensive root systems.

31. Which of the following would be the best way to determine if a plant has a vascular system?

- A. Determine whether or not the plant reproduces.
- B. Determine whether or not the plant photosynthesizes.
- C. Determine whether or not the plant has chloroplasts.
- D. Determine whether or not the plant has a root system.

32. What would happen to a non-vascular plant if it was placed in a dry environment?

- A. It would begin to produce its own water.
- B. It would store water for use in the future.
- C. It would not be able to obtain water.
- D. It would extract water from underground.

33. Protists are one-celled organisms with nuclei and organelles. Some protists can make their own food, some cannot. Which of the following protists are classified as photosynthetic?

- A. euglenoids
- B. protozoa
- C. ciliates
- D. amoebas

34. Fill in the blank.

A scientist was looking through a microscope and saw a single-celled organism that had no nucleus. She concluded that the organism was a _____.

- A. protist
- B. fungus
- C. moneran
- D. mold

35. Fill in the blank.

Seaweeds, such as kelp, are _____.

- A. monerans
- B. plants
- C. protists
- D. prokaryotes

36. How do some protists move about?

- A. They use villi to attach to other organisms.
- B. They use jointed appendages.
- C. They use paired wings to fly.
- D. They use flagella or cilia.