

Today you will be taking the seventh grade quarter two assessment. This test is designed to test your skills and knowledge in science. It has questions taken from science classes, as well as about experiments. You should make sure to read each question carefully, including the information given at the beginning of each section. Examine the diagrams to help you understand the questions as well. Some questions may refer to diagrams or information from the previous page.

For the multiple choice sections, make sure to place your answers on your Scantron sheet in pencil

Make sure the Scantron has your full name, neatly written, and your student ID number.

For the open ended questions, make sure to read all the information, and write your answer clearly in the space provided

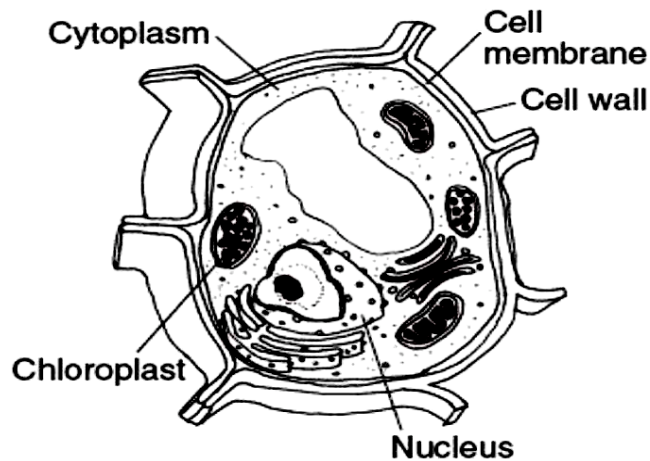
1. (C3) A student is separating a mixture of sand, salt and iron. Which process does NOT use the physical properties of the substances to separate the mixture?
 - A) Using a magnet to remove the iron.
 - B) Using filtering to remove the sand from saltwater.
 - C) Using evaporation to remove salt from water.
 - D) Using particle size to remove the sand and salt.

2. (C15) Substances pass into and out of a living animal cell through the:
 - A) nuclear membrane
 - B) cell membrane
 - C) cell wall
 - D) cytoplasm

3. (C15) What do all cells have in common?
 - A. They carry out life processes
 - B. They take part in fertilization
 - C. They reproduce sexually
 - D. They are unable to reproduce



4.(C15) The diagram below shows a cell.



Where would this cell most likely be found?

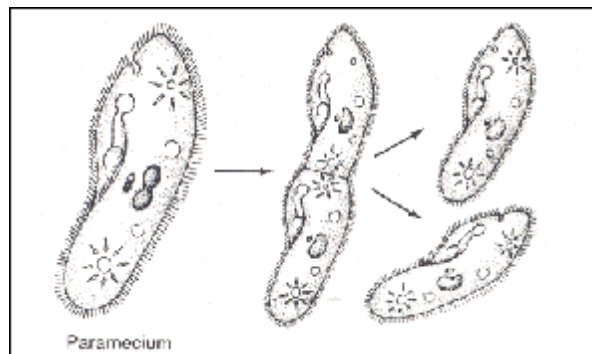
- A) Human B) Frog C) Soil fungus D) Leaf

5. (C25) Single-celled organisms can reproduce and create cells exactly like themselves without combining genes from two different parent cells. When they do this, they use a type of :

- A. asexual reproduction. C. gamete formation.
B. natural selection. D. sexual reproduction.

6. (C25) The diagram below shows an example of:

- A. spontaneous generation
B. asexual reproduction
C. Photosynthesis
D. Respiration

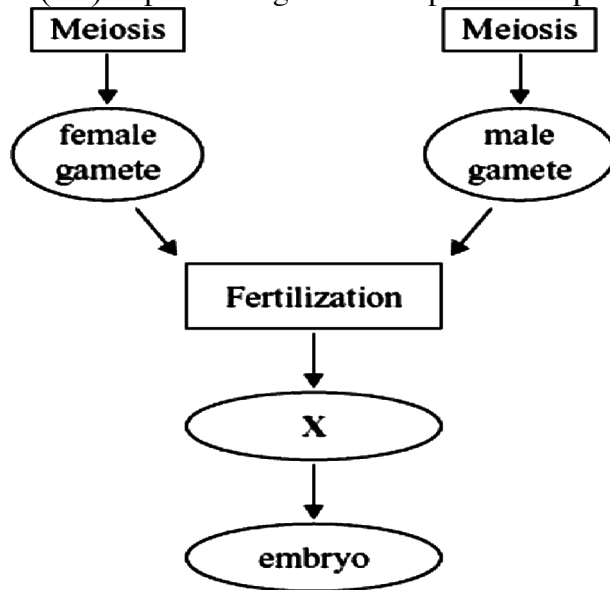


7. (C26) Which of the following takes place during fertilization in animals and humans?

- A) production of sperm and egg
B) development of embryo
C) division of egg
D) joining of sperm and egg



8. (C26) A partial diagram of a reproductive process is shown below.



Which of the following labels belongs in the oval marked X?

- A) egg
- B) zygote
- C) sperm
- D) fetus

9. (C27) Color blindness is a sex-linked gene. Males are more likely to be color blind than females because color blindness is

- A. dominant in one sex and recessive in the other.
- B. influenced by the hormones present in the individual
- C. carried only on the X-chromosome and the male has only one X-chromosome.
- D. carried only on the Y-chromosome and the female does not have a Y-chromosome.



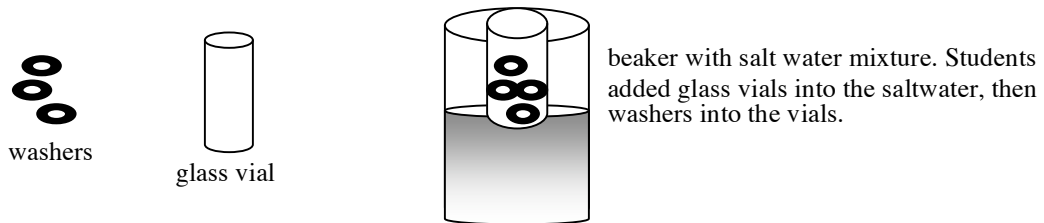
EXPERIMENT QUESTIONS

10. (CINQ5) Which is the **best** tool to measure the mass of salt added to a beaker of water?

- A) A ruler
- B) A beaker
- C) A balance
- D) A spoon

Read the following experimental procedure, then answer questions 11-13.

A group of students was given four beakers containing saltwater. They knew the amounts of salt and water in the beakers. They next floated one vial upright in each beaker and added washers (metal discs) into the vials one by one until each vial sank. They counted the number of washers it took to sink each of the four vials, then repeated the trial three times for each beaker.



11. (CINQ1) Which statement **best** describes the problem that the group was trying to investigate?

- A) How does the salinity of water affect the mass needed to sink an object?
- B) How does mass affect floating?
- C) How many trials does it take a vial with six washers to sink in a 25% solution?
- D) What is the salinity in each beaker?

12. (CINQ8) In order to draw a valid good conclusion, it is **most** important that the group:

- A) Use the same amount of saltwater solution in each beaker
- B) Keep the number of washers added the same for each beaker
- C) Time how long it takes each vial to sink
- D) Keep the size of each vial the same

13. (CINQ3) What is the **best** reason for the group performing three trials?

- A) To control variables and keep them constant.
- B) To increase reliability and get the same results each time.
- C) To increase mass to see what effect it has.
- D) To increase salinity to see what effect it has.



STUDENT NAME _____
SEVENTH GRADE QUARTER TWO ASSESSMENT
NAME _____

61-63 Use the following experiment to answer these questions

A student took a sample of water from a pond and examined it under a microscope. She identified several species of protozoans, including two species of *Paramecium* that are known to eat the same food. The student decided to examine the water sample every day for a week. She added food for each *Paramecium* each day and counted the number of each species. Her findings are summarized in the table below.

NUMBER OF *PARAMECIUM* IN POND WATER SAMPLE

Day	Species <i>S</i>	Species <i>T</i>
1	50	50
2	60	80
3	100	90
4	150	60
5	160	50
6	160	30
7	160	20

61 (CINQ7) .(3 pts) Using the axes below, construct a good graph showing the number of each species of *Paramecium* the student found each day. Be sure to label the axes



