

Today you will be taking the SEVENTH grade QUARTER THREE 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.

Make sure the Scantron has your full name, neatly written.

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

1. (C17) Which is NOT a purpose of the human musculo-skeletal system?

- A) providing shape and support
- B) protecting internal organs
- C) producing oxygen
- D) storing certain materials

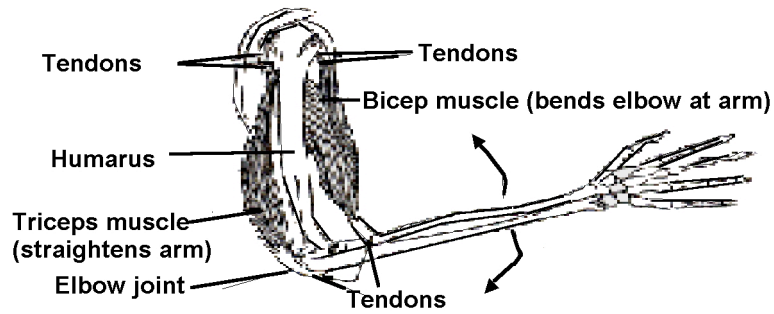
2. (C17) Which organ is not part of the muscular system?

- A) Brain
- B) Heart
- C) Tongue
- D) Bicep

3. (C17) A girl found the skull of an animal. She did not know what the animal was, but she was sure that it preyed on other animals for its food because of how it looked. Which clue below best led to her conclusion?

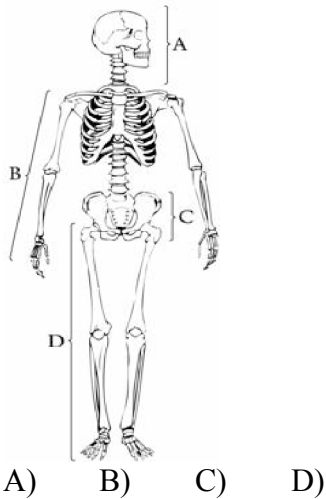
- A) The eye sockets faced sideways.
- B) The skull was much longer than it was wide.
- C) There was a projecting ridge on the front of the skull.
- D) Four of the teeth were long and pointed.

4. (C17) The diagram below best demonstrates that:



- A. the skeleton protects body organs
- B. bones are held together by joints and ligaments
- C. muscles and bones work together to move body parts
- D. cartilage protects and cushions bones

5. (C17) Which part of the human skeleton is most like the bones in a bird's wing?



6. (C17) Which of the following factors will decrease (lower) your heart rate?

- A) Exercising rapidly.
- B) Sleeping quietly.
- C) Yelling loud.
- D) Eating fast.

7. (CINQ2) Which is probably the **most** reliable and/or credible source of scientific information about a scientific issue, such as cloning?

- A) A presentation by a politician.
- B) An article in a scientific journal with results of research.
- C) A website from a college student.
- D) A talk radio show.

8. (CINQ5) Which of the following physical properties has the same units in the metric (SI) and the English (standard) system?

- A) Length B) Volume C) Mass D) Time

9. (CINQ3) A class wants to do an experiment to determine how exercise affects a person's heart rate. Before they do the experiment, they want to determine each person's average resting heart rate as a control group. In order to do this they should:

- A) Take each person's heart rate once at the beginning of class.
- B) Take each person's heart rate several times during the week and average the results.
- C) Take each person's heart rate once in the middle of class and average the results.
- D) Let each person measure their heart rate once whenever they want.

10. (CINQ1) Which is a question they could NOT investigate through a scientific investigation?

- A) How does the fitness of a person affect their heart rate?
- B) How does the attractiveness of a person affect their heart rate?
- C) How does the diet of a person affect their heart rate?
- D) How does the height of a person affect their heart rate?



STUDENT NAME _____
SEVENTH GRADE QUARTER THREE ASSESSMENT 0809

Use the information on the next pages to answer the four open-ended experimentation questions. Answer the questions in the space provided. Make sure to write clearly and neatly, while answering the question fully. Remember to answer the question, then WRITE a good explanation. You can always add diagrams or charts if you think it will help explain your answer.

A class does an experiment to test if running in place affects heart rate. They measure the heart rate of each person at the beginning of class.

They average the heart rate of the whole class, then each person runs for 5 minutes.

They then measured the heart rate of each person afterwards, and found that the average went up 10 beats per minute.

Their data table is shown below:

Start of class (resting)(26 people) : average heartbeat is 88 bpm

End of class (after running) (23 people) : average heartbeat is 98 bpm

Use these results to answer the questions on the following pages



