Intro to the Skeletal System WebQuest

Directions: Use the following website to answer the questions that follow.
http://kidshealth.org/kid/htbw/bones.html

Part 1
1. True or False. The bones in your body are alive. They are always changing.
2. What is the name of the thin, dense membrane that covers the outer surface of the bone? ________________
3. What are two characteristics of compact bone? ____________________ and ____________________
4. True or False. Cancellous bone is harder than compact bone.
5. What is the main function of bone marrow?
______________________________________________________
6. Click on the slideshow to view the diagram of a bone. Answer the following questions:
   a. The periosteum of the bone helps to ________________ bone tissue.
   b. Compact bone is ________________ in color.
   c. Another name for cancellous bone is ________________ bone.
   d. Bone marrow makes ____________ blood cells, ____________ blood cells and ________________.

Part 2
1. Approximately how many bones did you have as a baby? ________________
2. How many bones do you have as an adult? ____________________
3. What happens to your bones as you get older?
   a. _____________________________________________________________________
   b. _____________________________________________________________________
4. At what age do our bones stop growing in length? ________________
5. Watch the video, “Getting an X-ray”.
   a. Why do you have to take off all jewelry and metal objects?
   ________________________________________________________________
Part 3

1. How many bone is your vertebrae comprised of? ____________
2. Your cervical vertebrae is comprised of _______ bones. These bones are in the back of your neck and help support your head and neck.
3. Your thoracic vertebrae is comprised of _______ bones. They help to anchor your ________ in place.
4. Below your thoracic vertebrae are ________ lumbar bones.
5. Finally the ____________ is made up of five vertebrae that is fused together to form one bone and the coccyx which is made of ________ fused bones.
6. What are two functions of disks that are found between each vertebrae?
   _______________________
   _______________________
   _______________________
7. Label the missing bones on the diagram →

Part 4

1. What three organs do your ribs protect?
   a. ___________________ b. ____________________ c. ______________________
2. Approximately, how many pairs of ribs do you have? ______________
3. What type of vertebrae hold your ribs in place?
   a. Cervical  b. thoracic  c. lumbar  d. sacral  e. coxygeal
4. Why are the last two ribs called floating ribs?
   ______________________________
   ______________________________

Part 5

1. What is the smallest bone in your body? ________________________________
2. What is the only bone in your head you can move? ______________________
3. How do sutures in a baby’s head help pass through the birth canal? ____________________________________________________________________

4. What is another name for the shoulder blade? ________________________________

5. What three bones comprise the arm?
   a. __________________________ b. __________________________ c. __________________________

6. How many bones make up your fingers? __________

7. How many bones make up your thumbs? __________

**Part 6**

1. What three systems of the body does the pelvis protect?
   a. __________________________ b. __________________________ c. __________________________

2. What is the longest and strongest bone in the body? __________________

3. What is another name for the knee cap? __________________________

4. What are the three bones that comprise the leg?
   a. __________________________ b. __________________________ c. __________________________

5. Why are the leg and arm bones wider at the ends than in the middle? ____________________________________________________________________

6. What bone protects the knee joint? ______________________________

7. How many bones do we have in our feet and ankles? __________________

8. How many bones do we have in each toe? __________________

**Part 7**

1. Define the term joint. _____________________________________________________________

2. True or False. All joints move.

3. Provide an example of a fixed joint that can be found in your skull. ______________________

4. Look for the following slideshow under the “bones for teens” section to answer the questions below. a. True or False. The knee is a moving joint.

   b. True or False. Cartilage is found in the middle of bones.

c. True or False. Muscles only pull, they don’t push.

   d. True or False. The heart signals muscles in your arms and legs to contract and relax.
e. True or False. Ligaments connect bone to bone.
f. True or False. Tendons connect bone to muscle.
g. True or False. The knee is a hinge joint and moves in many directions.
5. Besides your knee, what is another example of a hinge joint?

Part 8
List four ways you can help protect your bones and keep them healthy.
1. ________________________________________________________________
2. ________________________________________________________________
3. ________________________________________________________________
4. ________________________________________________________________

Click on the blue link “broken bones” and answer the following questions.
1. What is another name for a broken bone?

Watch the video, “casts”.
2. What are the layers of a cast? i. _________________________ ii. _________________________
3. What does an orthopedic doctor specialize in?

4. What are three reasons you may contact your doctor regarding your cast?
   a. ________________________________________________________________
   b. ________________________________________________________________
   c. ________________________________________________________________
5. What can you do if you have an itch inside your cast?
   a. ________________________________________________________________
   b. ________________________________________________________________
6. Define the following:
   a. Complete fracture: ____________________________________________
   b. Greenstick fracture: ____________________________________________
   c. Single fracture: ________________________________________________
   d. Comminuted fracture: __________________________________________
   e. Bowing fracture: _______________________________________________
   f. Open fracture: _________________________________________________