TEACHER ANSWER KEY

Dear Fido (or Max, or Sophie, or Buddy, or Molly), How am I Like Thee? Let Me Count the Ways

1. Anatomy Matching

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>_____</td>
</tr>
<tr>
<td>2.</td>
<td>_____</td>
</tr>
<tr>
<td>3.</td>
<td>_____</td>
</tr>
<tr>
<td>4.</td>
<td>_____</td>
</tr>
<tr>
<td>5.</td>
<td>_____</td>
</tr>
<tr>
<td>6.</td>
<td>_____</td>
</tr>
<tr>
<td>7.</td>
<td>_____</td>
</tr>
<tr>
<td>8.</td>
<td>_____</td>
</tr>
<tr>
<td>9.</td>
<td>_____</td>
</tr>
<tr>
<td>10.</td>
<td>_____</td>
</tr>
<tr>
<td>11.</td>
<td>_____</td>
</tr>
</tbody>
</table>
2. What similarities do you see between the dog pelvis and the human pelvis?
   *One possible answer would be that in both cases the legs are attached to the pelvis.*

3. What differences do you see between the dog pelvis and the human pelvis?
   *The human’s is more bowl shaped while the dog’s is longer and flatter.*

4. How many pairs of ribs do dogs have?
   13

5. How many pairs of ribs do humans have?
   12

6. Locate the 7 cervical vertebrae in the dog skeleton. How many cervical vertebrae are there in the human skeleton?
   7

7. Locate the 13 thoracic vertebrae in the dog skeleton. How many thoracic vertebrae are there in the human skeleton?
   12

8. Locate the 7 lumbar vertebrae in the dog skeleton. How many lumbar vertebrae are there in the human skeleton?
   5

9. Here’s a **THOUGHT QUESTION**. Do you think a dachshund would have more vertebrae than other breeds of dogs? Why or why not?
   *Dachshunds have the same number as all other dogs. They’re STILL dogs.*

10. Check out the human and dog skulls. How many teeth are there in the dog’s skull?
    42

11. How many teeth are there in the human’s skull?
    32

12. How do the dog’s teeth appear to be adapted for the types of foods that dogs eat?
    *They’re shaped for ripping and tearing, as dogs are meat eaters. Long sharp canines are characteristic of predators.*

13. How do the human’s teeth appear to be adapted for the types of foods that humans eat?
    *Some are sharp for eating meat and some have more flattened surfaces for grinding plant material as humans are omnivores.*

14. Going back to the skeletons, how many phalanges per limb do you see on the human skeleton? How about on the dog skeleton?
    5, 5
15. Going back to the dog and human skull, find the hole at the base of the skull where the spinal cord enters. This hole is called the **foramen magnum**. What do you notice about the position of the foramen magnum in the human skull as compared to the dog skull? *It is more centered in the base of the skull in the human.*

16. Thinking about your answer to question 15 above, what do you predict you might notice about the position of the foramen magnum in a chimpanzee skull? **Explain.** *It would be more centered in the base of the chimp’s skull, as we are more closely related to chimps than we are to dogs.*

17. Possible answers:

- **Our backbone is S-shaped rather than C-shaped like the dog’s.**
- **The position of the foramen magnum is more centrally located in the base of the human skull.**
- **Our pelvis is more bowl shaped rather than long and flat like the dog’s pelvis.**