**Understanding Evolution: Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_\_\_\_\_**

**Homology and Analogy**

<http://evolution.berkeley.edu/evolibrary/article/0_0_0/similarity_ms_01>

1. **Similarities and differences: understanding homology and analogy**

a) Define homology:

b) Define analogy:

c) In the image of the people (the sisters and the Elvis impersonators), which pair represents an analogy and which a homology?

2. What is a tetrapod?

3. What are the six bones found in all tetrapod fore-limbs?

4. Identify these limbs, to what animal do they belong? (*label each with both answers*)



5. What did the common ancestor of all modern tetrapods look like?

6. What Homologous traits do the following organisms have?

 Oak & Ginko –

 Dragonfly & Butterfly -

 Beaver & Elephant -

7. Similar structures that evolved independently are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

8. a) How are *Thylacosmilus* and *Smilodon* similar?

 b) How are they different?

9. Are similarities between sharks and dolphins homologous or analogous? **EXPLAIN why you would conclude this.**

10. Considering all of the evidence, are the "wings" (actually flaps of skin stretched between the legs) of sugar gliders and flying squirrels homologous or analogous structures? **EXPLAIN why you would conclude this.**