

EVIDENCE SUPPORTING EVOLUTION

VOCABULARY – Use the resources on Mr. Hanna’s website to define the following key terms related to heredity.

- 1) EVOLUTION –
- 2) LAW OF SUPERPOSITION –
- 3) EMBRYO –
- 4) HOMOLOGOUS STRUCTURES –
- 5) VESTIGIAL STRUCTURES –

SHORT RESPONSE – Provide a short answer (a few sentences or less) in response to each prompt.

- 6) What does it mean to say that species have “evolved”?
- 7) How does the law of superposition help us interpret the fossil record to provide evidence supporting the theory of evolution?
- 8) Because insects often live short lives and go through many generations in a short time, scientists often observe them to study heredity. How have we observed evidence of evolution in populations of mosquitos?
- 9) When scientists compare the early-stage embryos of very different species such as fish, chickens, and humans, what do they notice?
- 10) When we compare the bone structure of a human arm with a cat leg, a whale fin, or even a bat wing, we notice similar bones with a similar layout. What does this suggest about these organisms?
- 11) Scientists have found pelvic bones in species such as whales and snakes that don’t have legs. Why might these animals have pelvic bones?
- 12) Why do scientists say that humans are more closely related to chimpanzees than orangutans (*we share a more-recent common ancestor with chimps*)? What evidence do we have to support this statement?