

Rating Guide
ILS-Fossil Park Cluster

- 1 [1] Allow 1 credit for *C*.

- 2 [1] Allow 1 credit. Acceptable responses include, but are not limited to:
 - Many locations contain tropical marine fossils that could only live in warmer water found near the equator.
 - Tectonic processes generated new sea floor because now an ocean is located between the continents of North America and Africa.

- 3 [1] Allow 1 credit for *A*.

- 4 [1] Allow 1 credit if *both* responses are correct. Acceptable responses include, but are not limited to:
 - The rocks at Penn Dixie Park show tilting./Rocks at Penn Dixie Park are not horizontal.
 - Sedimentary rock layers at both locations are evidence for deposition of sediments in water.
 - The rocks containing marine fossils at Thacher Park show a high elevation./Thacher Park has marine fossils at an elevation of 1657 feet.
 - Weathering and erosion have altered the shape of the surface bedrock at Penn Dixie Park.

- 5 [1] Allow 1 credit. Acceptable responses include, but are not limited to:
 - The surface bedrock of both locations are made of Hamilton shale.
 - Both locations have the Onondaga limestone underneath Hamilton shale at the surface.
 - Both locations show a similar sequence of rock layers.

Rating Guide
ILS-Globe Cluster

- 1 [1] Allow 1 credit for *D*.

- 2 [1] Allow 1 credit. Acceptable responses include, but are not limited to:
 - because force *X* and force *Y* are equal
 - Forces *X* and *Y* are equal and opposite to keep the globe in a fixed position.
 - When forces *X* and *Y* are balanced, the object will not change its motion.

- 3 [1] Allow 1 credit for *A*.

- 4 [1] Allow 1 credit for *B*.

- 5 [1] Allow 1 credit. Acceptable responses include, but are not limited to:
 - Since the globe is at a lower position, the potential energy is less.
 - The potential energy decreases as the globe moves from position 1 to position 2.
 - the potential energy decreases

Rating Guide
ILS–Organisms Cluster

- 1 [1] Allow 1 credit for *D*.

- 2 [1] Allow 1 credit for *two* correct responses. Acceptable responses include, but are not limited to:
 - There are 4 limbs in both the chicken and the rabbit, and the fish has no legs.
 - The chicken and rabbit breathe air through lungs on land, while the fish breathes through gills in water.
 - The mid- and late-stage chicken embryo looks similar to the mid- and late-stage rabbit embryo. Neither look like the fish embryo.

- 3 [1] Allow 1 credit for bird as the organism and correct evidence. Acceptable responses include, but are not limited to:
 - The way that the bones attach to each other in the bird wing is most similar to the *Velociraptor*.
 - The “finger bones” of the *Velociraptor* are less in number and closer together like the bones in the bird wing.
 - The bone structure in the *Velociraptor* is most similar to the bone structure in the bird wing.

- 4 [1] Allow 1 credit for *A*.

- 5 [1] Allow 1 credit for *B*.