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.
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
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 $B$. 