#### 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.

#### Item Alignment ILS – Fossil Park Cluster

Item Number	Performance Expectation
1	MS-ESS1-4
2	MS-ESS2-3
3	MS-ESS1-4
4	MS-ESS2-2
5	MS-ESS1-4

### 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

### Item Alignment ILS – Globe Cluster

Item Number	Performance Expectation
1	MS-PS2-5
2	MS-PS2-2
3	MS-PS2-3
4	MS-PS2-2
5	MS-PS3-2

### 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.

Item Alignment
ILS – Organisms Cluster

Item Number	Performance Expectation
1	MS-LS4-3
2	MS-LS4-3
3	MS-LS4-2
4	MS-LS4-1
5	MS-LS4-1

## Rating Guide ILS-Investigating Chemical Reactions Cluster

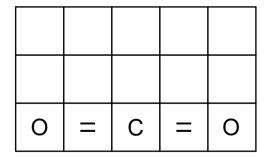
1 [1] Allow 1 credit for (	1	[1]	Allow	1	credit for	0
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2 [1] Allow 1 credit for two oxygen atoms connected to one carbon atom with double bonds in a linear structure.

### **Examples of a 1-credit response:**

0	Ш	С	0

0	I	O	Ш	0



3 [1] Allow 1 credit for:

A: the same

B: solid and two gases

C: the substance and the plate are not a closed system

- 4 [1] Allow 1 credit for A.
- 5 [1] Allow 1 credit for *B*.

# Item Alignment ILS – Investigating Chemical Reactions Cluster

Item Number	Performance Expectation
1	MS-PS1-2
2	MS-PS1-1
3	MS-PS1-5
4	MS-PS1-2
5	MS-PS1-6