

Missouri Grade 8 Science MAP Practice Form – Complete Answer Key

Prepared for student review. Session 1 and Session 2 included.

SESSION 1

1 A

2 C

3 organs → tissues → organs → organelles

4 A straight line through air; B bends entering glass; C black backing is opaque.

5 A Layer 7 oldest. B Marine to land environment changed over time. C Volcanic events may have contributed.

6 A Sizes not to scale. B Distances not to scale.

7 A Overall warming trend. B Claim plausible: fuel use and temps rise together. C e.g., ice melt, sea level rise.

8 Ball on 3-meter shelf; force = gravity; arrow downward.

9 B

10 unbalanced / decrease / slower speed than

11 B then D

12 D

13 Claim incorrect; greater mass means greater KE at same speed.

14 Aspen trees → elk → wolves ; flow of energy

15 C

16 C

17 C

18 A

19 Sun=3 Producers=4 Consumers=1 Decomposers=2 Nutrients=5

20 A tree populations decrease B elk may increase short term C beavers decrease long term

21 Advantage: young trees grow to maturity. Disadvantage: beavers lose access to trees.

SESSION 2

1 mass / increases

2 Chemical: Solid A + Liquid A ; Solid B + Liquid A

Physical: Solid A + Liquid B ; Liquid A + Liquid B

3 Longest to shortest: 4,3,1,2

4 A chloroplasts, cell wall (or large central vacuole)

B Animals do not photosynthesize / no rigid wall needed.

5 A Spheres 1 and 2 same PE (same height).

B Sphere 1 has more PE than 3.

6 A Western Interior Seaway and Hudson Seaway (any sea areas shown)

B Agree if Missouri was underwater near seaway areas then deposits possible.

7 A Net force left (10N vs 5N), sphere moves left.

B Rough surface adds friction, slows motion.

8 B and D

9 Uppermost: Miohippus ; Bottommost: OROhippus

10 C

11 some / beneficial / better

12 A teosinte

B choose two: B and D

13 C

14 sun / convection in the mantle / Pacific Plate

15 Constructive: 1,3,4 Destructive: 2,5

16 A and E

17 Sequence: 3,4,1,2

18 Graph points from map. Conclusion: northwest / increases / increases

19 B

20 B

21 A Risk remains elevated after March swarm; monitor and prepare evacuation.

B Volcano warnings often give longer lead time than tornadoes, allowing evacuation and hazard reduction.