

Practice Test – Grade 8 Science Answer Key

Item Position	Item Type	TEKS Alignment	Maximum Number of Points	Correct Answer(s)
1	Multiple Choice	8.3.8.8.B	1	B
2	Multiple Choice	8.4.7.12.F	1	B
3	Multiple Choice	8.1.6.6.B	1	D
4	Multiple Choice	8.4.8.11.B	1	B
5	Multiple Choice	8.1.8.5.E	1	D
6	Multiple Choice	8.3.8.10.C	1	A
7	Text Entry	8.1.7.5.B	1	5 See Appendix 1.1
8	Multiple Choice	8.2.6.8.D	1	C
9	Multiple Choice	8.3.8.7.A	1	D
10	Drag and Drop	8.1.8.5.B	2	number of protons, number of electrons, number of valence electrons See Appendix 1.2
11	Multiple Choice	8.1.8.5.D	1	B
12	Hotspot	8.4.8.11.A	2	Mice and Goats See Appendix 1.3
13	Multiple Choice	8.3.8.10.A	1	A
14	Multiple Choice	8.1.8.5.A	1	C
15	Multiple Choice	8.1.7.6.A	1	C
16	Short Constructed Response	8.2.8.6.A	2	See Appendix 1.4
17	Multiple Choice	8.4.8.11.C	1	B
18	Evidence Based Selected Response	8.3.8.8.A	2	B, A
19	Multiple Choice	8.2.6.8.A	1	B
20	Multiple Choice	8.3.8.9.B	1	A
21	Multiple Choice	8.3.8.7.A	1	B
22	Evidence Based Selected Response	8.2.8.6.C	2	B, C
23	Multiple Select	8.3.8.9.C	2	A, D See Appendix 1.5
24	Multiple Choice	8.2.8.6.A	1	C
25	Short Constructed Response	8.4.8.11.A	2	See Appendix 1.6
26	Multiple Select	8.2.8.6.C	2	A, D See Appendix 1.7

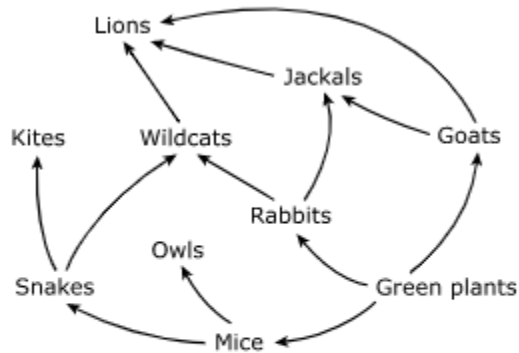
Item Position	Item Type	TEKS Alignment	Maximum Number of Points	Correct Answer(s)
27	Multiple Choice	8.4.7.11.A	1	C
28	Multiple Choice	8.4.7.14.B	1	A
29	Multiple Choice	8.2.6.8.C	1	B
30	Multiple Choice	8.3.8.9.C	1	C
31	Multiple Choice	8.4.7.12.D	1	C
32	Multiple Choice	8.2.6.9.C	1	B
33	Multiple Choice	8.3.8.7.B	1	B
34	Multiple Choice	8.4.8.11.B	1	B
35	Multiple Choice	8.1.6.6.A	1	D
36	Multiple Choice	8.4.7.12.B	1	A
37	Multiple Choice	8.3.8.9.A	1	C
38	Multiple Choice	8.1.8.5.C	1	B

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Appendix

1.1

A student researches an ecosystem and draws the food web shown.



How many secondary consumers are in this food web?

Enter your answer in the box.

1.2

Describe the roles of subatomic particles within an atom.

Move the correct answer to each box. Not all answers will be used.

- number of protons
- number of neutrons
- number of electrons
- number of valence electrons

The determines the identity of an atom and is equal to the .

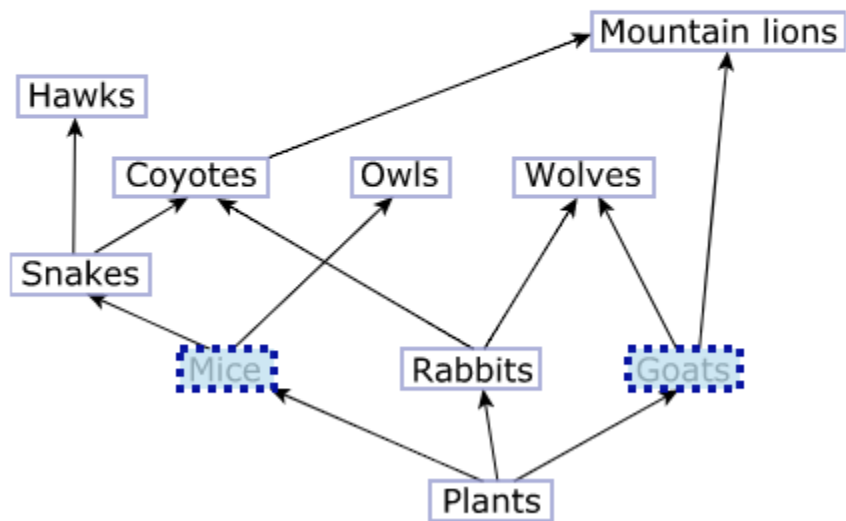
The chemical reactivity of an atom is determined by the .

1.3

A partial food web is shown.

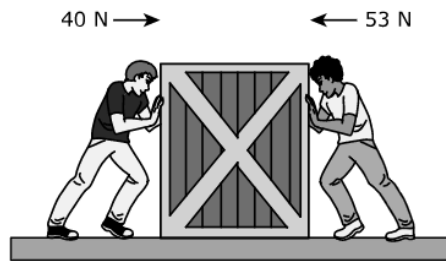
Which two organisms compete with rabbits for biotic resources?

Select **TWO** correct answers.



1.4

Two students push on the opposite sides of a crate, with the force applied by each student in newtons (N), as shown in the diagram.



Assuming the crate is on a frictionless surface, describe the effect of these forces on the crate.

- Will the crate move toward the left, toward the right, or not at all?
- What is the direction and the magnitude of the net force on the crate?

Review the diagram carefully. Then enter your response in the box provided.

B *I* U ~~Strikethrough~~ ☰ ☷ ☰ ☷ ✂ 📄 📄 ↶ ↷ ABC 📄 Ω

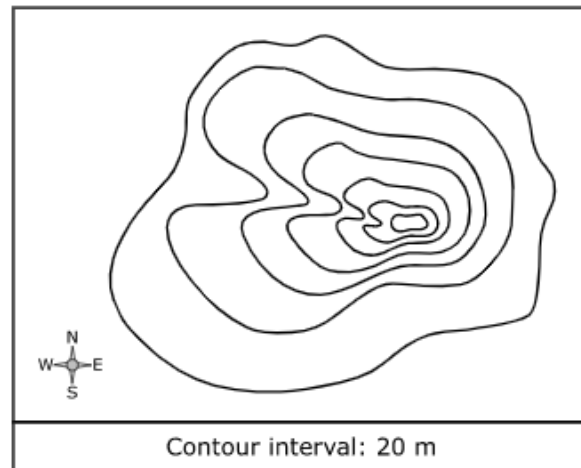
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The student describes both of the following:

- The crate will move to the left.
- The net force on the crate is 13 N left.

1.5

A topographic map is shown.



Which statements accurately describe features of the land represented by the topographic map?

Select **TWO** correct answers.

There is a stream.

There is a large valley.

There is a consistent slope.

There is one peak.

There is a river valley.

1.7

A researcher observes a car speeding up from rest. The researcher records data about the car and the car's motion.

Which data points can be used to calculate the net force that was acting on the car when it was speeding up?

Select **TWO** correct answers.

The car's mass is 1,000 kg.

The car's speed increased for 7 seconds.

The car started from rest.

The car's acceleration was 4 m/s^2 .

The car traveled a total of 300 m.