

**Assessment Name:** MorganHill\_Science\_Grade8\_B1\_1112  
**Subject Name:** Science  
**Grade(s)/Course(s):** Grade 8  
**Total Number of Items** 49

<b>STANDARDS</b>	
1.a - Motion	1
1.b - Motion	1
1.c - Motion	2
1.d - Motion	1
1.e - Motion	1
1.f - Motion	2
2.a - Forces	1
2.b - Forces	1
2.c - Forces	1
2.d - Forces	2
2.e - Forces	1
2.f - Forces	1
2.g - Forces	1
3.a - Structure of Matter	2
3.b - Structure of Matter	2
3.c - Structure of Matter	1
3.d - Structure of Matter	1
3.e - Structure of Matter	2
3.f - Structure of Matter	1
4.a - Earth in the Solar System (Earth Science)	1
4.b - Earth in the Solar System (Earth Science)	2
4.c - Earth in the Solar System (Earth Science)	1
4.e - Earth in the Solar System (Earth Science)	2
5.a - Reactions	1
5.b - Reactions	2
5.c - Reactions	1
5.d - Reactions	2
5.e - Reactions	1
7.a - Periodic Table	2
7.b - Periodic Table	2
7.c - Periodic Table	3
8.a - Density and Buoyancy	1
8.b - Density and Buoyancy	2
8.d - Density and Buoyancy	1

**BLOOM'S TAXONOMY**

Evaluation	1
Synthesis	2
Analysis	13
Application	11
Comprehension	9
Knowledge	13
Conceptual Understanding	0
N/A	0

**DIFFICULTY LEVEL**

Low	12
Medium	30
High	7
N/A	0

#	Standard	Difficulty Level				Bloom's Taxonomy							
		Low	Medium	High	N/A	Evaluation	Synthesis	Analysis	Application	Comprehension	Knowledge	Conceptual Understanding	N/A
1	1.a - Motion	Low									Knowledge		
2	1.b - Motion		Medium						Application				
3	1.d - Motion		Medium						Application				
4	1.c - Motion		Medium					Analysis					
5	1.c - Motion		Medium						Application				
6	1.e - Motion		Medium							Comprehension			
7	1.f - Motion		Medium					Analysis					
8	1.f - Motion		Medium					Analysis					
9	2.a - Forces		Medium							Comprehension			
10	2.b - Forces		Medium						Application				
11	2.c - Forces			High					Application				
12	2.d - Forces		Medium						Application				
13	2.d - Forces		Medium						Application				
14	2.e - Forces	Low						Analysis					
15	2.f - Forces		Medium								Knowledge		
16	2.g - Forces		Medium						Application				
17	3.a - Structure of Matter		Medium						Application				
18	3.a - Structure of Matter	Low									Knowledge		
19	3.b - Structure of Matter			High				Analysis					
20	3.b - Structure of Matter		Medium						Application				
21	3.d - Structure of Matter		Medium								Knowledge		
22	3.e - Structure of Matter		Medium							Comprehension			
23	3.e - Structure of Matter		Medium					Analysis					
24	3.f - Structure of Matter	Low								Comprehension			
25	4.a - Earth in the Solar System (Earth Science)		Medium								Knowledge		
26	4.b - Earth in the Solar System (Earth Science)	Low									Knowledge		
27	4.b - Earth in the Solar System (Earth Science)			High				Analysis					
28	4.c - Earth in the Solar System (Earth Science)		Medium								Knowledge		
29	4.e - Earth in the Solar System (Earth Science)	Low									Knowledge		

#	Standard	Difficulty Level				Bloom's Taxonomy							
		Low	Medium	High	N/A	Evaluation	Synthesis	Analysis	Application	Comprehension	Knowledge	Conceptual Understanding	N/A
30	4.e - Earth in the Solar System (Earth Science)		Medium								Knowledge		
31	5.a - Reactions			High				Analysis					
32	5.b - Reactions		Medium					Analysis					
33	5.b - Reactions		Medium							Comprehension			
34	5.c - Reactions		Medium							Comprehension			
35	5.d - Reactions		Medium							Comprehension			
36	5.d - Reactions			High			Synthesis						
37	5.e - Reactions	Low									Knowledge		
38	7.a - Periodic Table	Low									Knowledge		
39	7.a - Periodic Table		Medium							Comprehension			
40	7.b - Periodic Table	Low									Knowledge		
41	7.b - Periodic Table			High						Comprehension			
42	7.c - Periodic Table			High				Analysis					
43	7.c - Periodic Table	Low									Knowledge		
44	7.c - Periodic Table		Medium						Application				
45	8.a - Density and Buoyancy		Medium				Synthesis						
46	8.b - Density and Buoyancy	Low						Analysis					
47	8.b - Density and Buoyancy		Medium					Analysis					
48	8.d - Density and Buoyancy	Low				Evaluation							
49	3.c - Structure of Matter		Medium					Analysis					
<b>Total</b>		<b>12</b>	<b>30</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>13</b>	<b>11</b>	<b>9</b>	<b>13</b>	<b>0</b>	<b>0</b>

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<b>Item #</b>	<b>Correct Answer</b>	<b>Standard</b>
1	C	8 - 1.a - Motion - Students know position is defined in relation to some choice of a standard reference point and a set of reference directions.
2	B	8 - 1.b - Motion - Students know that average speed is the total distance traveled divided by the total time elapsed and that the speed of an object along the path traveled can vary.
3	B	8 - 1.d - Motion - Students know the velocity of an object must be described by specifying both the direction and the speed of the object.
4	B	8 - 1.c - Motion - Students know how to solve problems involving distance, time, and average speed.
5	A	8 - 1.c - Motion - Students know how to solve problems involving distance, time, and average speed.
6	A	8 - 1.e - Motion - Students know changes in velocity may be due to changes in speed, direction, or both.
7	D	8 - 1.f - Motion - Students know how to interpret graphs of position versus time and graphs of speed versus time for motion in a single direction.
8	C	8 - 1.f - Motion - Students know how to interpret graphs of position versus time and graphs of speed versus time for motion in a single direction.
9	C	8 - 2.a - Forces - Students know a force has both direction and magnitude.
10	D	8 - 2.b - Forces - Students know when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.
11	D	8 - 2.c - Forces - Students know when the forces on an object are balanced, the motion of the object does not change.
12	A	8 - 2.d - Forces - Students know how to identify separately the two or more forces that are acting on a single static object, including gravity, elastic forces due to tension or compression in matter, and friction.
13	A	8 - 2.d - Forces - Students know how to identify separately the two or more forces that are acting on a single static object, including gravity, elastic forces due to tension or compression in matter, and friction.
14	B	8 - 2.e - Forces - Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
15	D	8 - 2.f - Forces - Students know the greater the mass of an object, the more force is needed to achieve the same rate of change in motion.
16	C	8 - 2.g - Forces - Students know the role of gravity in forming and maintaining the shapes of planets, stars, and the solar system.
17	D	8 - 3.a - Structure of Matter - Students know the structure of the atom and know it is composed of protons, neutrons, and electrons.
18	D	8 - 3.a - Structure of Matter - Students know the structure of the atom and know it is composed of protons, neutrons, and electrons.
19	A	8 - 3.b - Structure of Matter - Students know that compounds are formed by combining two or more different elements and that compounds have properties that are different from their constituent elements.
20	D	8 - 3.b - Structure of Matter - Students know that compounds are formed by combining two or more different elements and that compounds have properties that are different from their constituent elements.
21	D	8 - 3.d - Structure of Matter - Students know the states of matter (solid, liquid, gas) depend on molecular motion.
22	C	8 - 3.e - Structure of Matter - Students know that in solids the atoms are closely locked in position and can only vibrate; in liquids the atoms and molecules are more loosely connected and can collide with and move past one another; and in gases the atoms and molecules are free to move independently, colliding frequently.
23	D	8 - 3.e - Structure of Matter - Students know that in solids the atoms are closely locked in position and can only vibrate; in liquids the atoms and molecules are more loosely connected and can collide with and move past one another; and in gases the atoms and molecules are free to move independently, colliding frequently.
24	B	8 - 3.f - Structure of Matter - Students know how to use the periodic table to identify elements in simple compounds.
25	B	8 - 4.a - Earth in the Solar System (Earth Science) - Students know galaxies are clusters of billions of stars and may have different shapes.

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Item #	Correct Answer	Standard
26	D	8 - 4.b - Earth in the Solar System (Earth Science) - Students know that the Sun is one of many stars in the Milky Way galaxy and that stars may differ in size, temperature, and color.
27	A	8 - 4.b - Earth in the Solar System (Earth Science) - Students know that the Sun is one of many stars in the Milky Way galaxy and that stars may differ in size, temperature, and color.
28	A	8 - 4.c - Earth in the Solar System (Earth Science) - Students know how to use astronomical units and light years as measures of distances between the Sun, stars, and Earth.
29	B	8 - 4.e - Earth in the Solar System (Earth Science) - Students know the appearance, general composition, relative position and size, and motion of objects in the solar system, including planets, planetary satellites, comets, and asteroids.
30	C	8 - 4.e - Earth in the Solar System (Earth Science) - Students know the appearance, general composition, relative position and size, and motion of objects in the solar system, including planets, planetary satellites, comets, and asteroids.
31	C	8 - 5.a - Reactions - Students know reactant atoms and molecules interact to form products with different chemical properties.
32	A	8 - 5.b - Reactions - Students know the idea of atoms explains the conservation of matter: In chemical reactions the number of atoms stays the same no matter how they are arranged, so their total mass stays the same.
33	C	8 - 5.b - Reactions - Students know the idea of atoms explains the conservation of matter: In chemical reactions the number of atoms stays the same no matter how they are arranged, so their total mass stays the same.
34	C	8 - 5.c - Reactions - Students know chemical reactions usually liberate heat or absorb heat.
35	D	8 - 5.d - Reactions - Students know physical processes include freezing and boiling, in which a material changes form with no chemical reaction.
36	C	8 - 5.d - Reactions - Students know physical processes include freezing and boiling, in which a material changes form with no chemical reaction.
37	A	8 - 5.e - Reactions - Students know how to determine whether a solution is acidic, basic, or neutral.
38	B	8 - 7.a - Periodic Table - Students know how to identify regions corresponding to metals, nonmetals, and inert gases.
39	C	8 - 7.a - Periodic Table - Students know how to identify regions corresponding to metals, nonmetals, and inert gases.
40	D	8 - 7.b - Periodic Table - Students know each element has a specific number of protons in the nucleus (the atomic number) and each isotope of the element has a different but specific number of neutrons in the nucleus.
41	B	8 - 7.b - Periodic Table - Students know each element has a specific number of protons in the nucleus (the atomic number) and each isotope of the element has a different but specific number of neutrons in the nucleus.
42	D	8 - 7.c - Periodic Table - Students know substances can be classified by their properties, including their melting temperature, density, hardness, and thermal and electrical conductivity.
43	B	8 - 7.c - Periodic Table - Students know substances can be classified by their properties, including their melting temperature, density, hardness, and thermal and electrical conductivity.
44	C	8 - 7.c - Periodic Table - Students know substances can be classified by their properties, including their melting temperature, density, hardness, and thermal and electrical conductivity.
45	B	8 - 8.a - Density and Buoyancy - Students know density is mass per unit volume.
46	C	8 - 8.b - Density and Buoyancy - Students know how to calculate the density of substances (regular and irregular solids and liquids) from measurements of mass and volume.
47	C	8 - 8.b - Density and Buoyancy - Students know how to calculate the density of substances (regular and irregular solids and liquids) from measurements of mass and volume.
48	D	8 - 8.d - Density and Buoyancy - Students know how to predict whether an object will float or sink.
49	A	8 - 3.c - Structure of Matter - Students know atoms and molecules form solids by building up repeating patterns, such as the crystal structure of NaCl or long-chain polymers.