

8th Grade Science Questions

31- 60

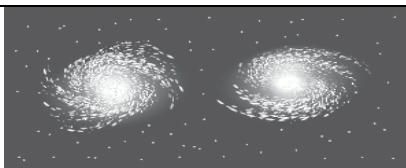
On index cards by 3/23-3/27

31. What factors must be included to describe a force?

- a. the amount of force and its speed
- b. the direction of the force and its effect
- c. the amount of force and its direction
- d. The type of force and its effect

32. A ball is dropped from the top of a tall building. As the ball falls, the upward force of air resistance becomes equal to the downward pull of gravity. When these two forces become equal in magnitude, the ball will

- A** flatten due to the forces.
- B** fall at a constant speed.
- C** continue to speed up.
- D** slow to a stop.



33. The galaxies pictured above would best be classified as

- a. barred galaxies.
- b. spiral galaxies.
- c. irregular galaxies.
- d. symmetrical galaxies.

34. To express the distance between the Milky Way galaxy and other galaxies, the most appropriate unit of measurement is the

- a. meter.
- b. kilometer.
- c. light-year.
- d. astronomical unit.

35. The following equations represent chemical reactions.

Chemical Reactions

1	$2\text{Na} + 2\text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
2	$\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
3	$\text{Mg} + \text{Cl}_2 \rightarrow \text{MgCl}_2$
4	$\text{NaOH} + \text{MgCl}_2 \rightarrow \text{NaCl} + \text{MgOH}$

Which equation shows that the total mass during a chemical reaction stays the same?

- a. 1
- b. 2
- c. 3
- d. 4

36. Test strategies for taking a multiple choice test include previewing the test by reading through the test quickly and answering the easiest questions first.

True or False

37. Which of the following forms of energy is released or absorbed in most chemical reactions?

- a. light energy
- b. electrical energy
- c. sound energy
- d. heat energy

38. Within a substance, atoms that collide frequently and move independently of one another are *most* likely in a

- A** liquid.
- B** solid.
- C** gas.
- D** crystal.

<p>39. An athlete can run 9 kilometers in 1 hour. If the athlete runs at that same average speed for 30 minutes, how far will the athlete travel?</p> <p>A. 18 kilometers B. 9 kilometers C. 4.5 kilometers D. 3.3 kilometers</p>	<p>40. A hiker is traveling north at a speed of 5 miles per hour. The hiker drops to 3 miles per hour for a half hour. After a while, the hiker turns to the northeast. Soon, the hiker resumes the speed of 5 miles per hour and at the same time, turns toward the east. If you assume the hiker's changes are instantaneous, how many times did the hiker's velocity change from the initial velocity?</p> <p>A. None B. Two C. Three D. Four</p>
<p>41. Which of the following is the term used to name a cluster of stars, nebulae, gases, dust and planets?</p> <p>A. Solar System B. Constellation C. Oort Cloud D. Galaxy</p>	<p>42. On a multiple choice test, when the answer is a number option one may toss out the high and low options and consider the middle range option.</p> <p>True or False</p>
<p>43. Which of these describes the shape of the Milky Way Galaxy?</p> <p>A. Barred B. Irregular C. Elliptical D. Spiral</p>	<p>44. On a multiple choice test, you should question options that contain negative or absolute words such as always, never, or every</p> <p>True or False</p>
<p>45. What is a light year?</p> <p>A. It is a unit that measures the point at which a star is in its life cycle. B. It is very small unit of measure C. It is the distance light travels in a year D. It is a measure of the quantity of light that can reach Earth in a year</p>	<p>46. The color, age, and temperature of a star is determined mostly by the</p> <p>A. The magnitude of the star. B. Closeness of the star to the center of a galaxy C. point at which the star is in its life cycle D. Distance the star is from earth.</p>
<p>47. Which characteristics most sets carbon apart from other elements?</p> <p>A. Carbon bonds to many other elements and to itself in many ways B. Carbon is found in living organisms. C. Carbon is a nonmetal that is solid at 25°C. D. Carbon has more than one electron available for bonding</p>	<p>48. Without stopping, a car travels a total distance of 200 miles in 5 hours. What is the average speed of the car?</p> <p>A. 205 mi/hr B. 40 mi/hr C. 20 mi/hr D. 5 mi/hr</p>
<p>49. Deuterium has 1 proton and 1 neutron in the nucleus; tritium has 1 proton and 2 neutrons. What are deuterium and tritium?</p> <p>A. two different elements B. two isotopes of hydrogen C. two forms of lithium (Li) D. two atoms with identical properties</p>	<p>50. Which of the following does not indicate that the forces on an object are unbalanced?</p> <p>A. The object slows down B. The object has a constant speed C. The object accelerates D. The object changes direction</p>

<p>51. Which description of a bicycle race relates a change in velocity?</p> <p>A. The red bicycle is stopped. B. The blue bicycle is accelerating at 2 Km/hr. C. The green bicycle is moving north over the first bridge. D. The silver bicycle is being ridden by a professional.</p>	<p>52. On a multiple choice test, when "all of the above" is an option, if two of the three options seem correct, it is a strong possibility that the all of the above is correct.</p> <p>True or False</p>
<p>53. The full moon is the brightest object in the night sky. Which of these best explains why this is a surprising fact?</p> <p>A. The Moon is very far away. B. The Moon produces no light of its own. C. The Moon is closer to earth than the stars D. The Moon is only half lit at full moon</p>	<p>54. The products in a chemical reaction always</p> <p>A. retain some of the same characteristics as the reactants B. have higher melting and boiling temperatures than the reactants C. have different properties than the reactants D. can be separated back into the reactants with a second chemical reaction</p>
<p>55. On a multiple choice test, you should question answers that contain negative or absolute words such as always, never, or every.</p> <p>True or False</p>	<p>56. In general, what do vertical columns in the periodic table mark?</p> <p>A. groups B. periods C. gases D. metals</p>
<p>57. When magnesium (Mg) metal is burned in the presence of oxygen (O₂), magnesium oxide (MgO) is produced. The properties of magnesium oxide are different than the individual properties of magnesium and oxygen because magnesium oxide is</p>	<p>58. In comparison of metals and nonmetals, metals tend to have</p>
<p>59. In order for cork, a type of wood, to float in water it would need to have a density</p> <p>A. that is less than 1 g/mL B. greater than 1 g/mL C. equal to 1 g/mL D. None of the above</p>	<p>60. An example of a compound MOST likely to be part of a living organism would be?</p>

31	c. the amount of force and its direction
32	b. fall at a constant speed
33	b. spiral galaxies.
34	c. light-year.
35	c. 3
36	True
37	d. heat energy
38	C. gas
39	C. 4.5 kilometers
40	C. Three
41	D. Galaxy
42	True
43	D. Spiral
44	True
45	C. It is the distance light travels in a year
46	C. point at which the star is in its life cycle
47	A. Carbon bonds to many other elements and to itself in many ways
48	B. 40 mi/hr
49	B. two isotopes of hydrogen
50	B. The object has a constant speed
51	B. The blue bicycle is accelerating at 2 Km/hr.
52	True
53	B. The Moon produces no light of its own.
54	C. have different properties than the reactants
55	True
56	A. groups
57	A compound
58	Greater conductivity and higher melting points than nonmetals.
59	A. that is less than 1 g/mL
60	glucose

