



Name:.....

Mark: 15

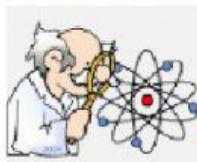
Class:.....

CHEMISTRY

Diagnostic test

GRADE 9 General

1.

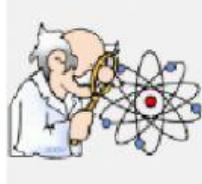


Q. _____ is anything that has mass and takes up space.

answer choices

- matter
- compound
- particle
- subatomic

2.

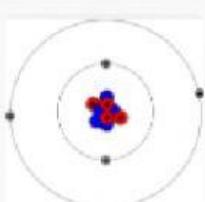


Q. All matter is composed of _____.

answer choices

- compounds
- atoms
- water
- H₂O

3.



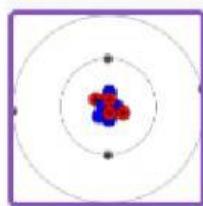
Q. The nucleus of the atom has the _____ and _____ in it.

answer choices

- protons and neutrons
- electrons and neutrons
- protons and electrons



4.

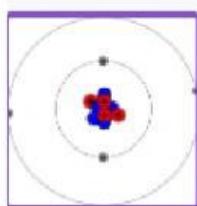


answer choices

- positive
- neutral

Q. A proton has a _____ charge.

- negative



answer choices

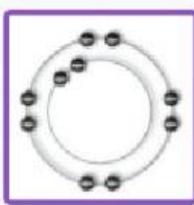
- positive
- neutral

Q. An electron has a _____ charge.

5.

- negative

6.



answer choices

- 10
- 2
- 8
- There is not enough information to answer this question.

Q. The diagram shows the arrangement of electrons in a neon atom. How many protons are present in this atom's nucleus?



7.

Q. What law of motion does this picture represent?

answer choices

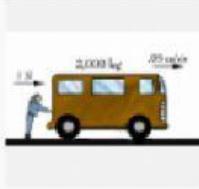
- Newtons 3rd law
- Newtons 1st law
- Newtons 4th law
- Newtons 2nd law

8.





9.



Q. What law of motion does this picture represent?

answer choices

- Newtons 1st law
- Newtons 4th law

- law of gravity
- Newtons 2nd law

10



Q. A unbalanced force means that an object is

answer choices

- zero net force
- sitting still

- changing its motion
- object at rest

12.



Q. What is the tendency of an object to resist a change in motion?

answer choices

- coffee
- Inertia

- motion
- gravity



13.



Q. If I kick a soccer ball across the field, what vocabulary word tells me why the ball would slow down in the grass?

answer choices

- acceleration
- gravity

- friction

14.

Q. According to Newton's second law of motion, ____.

answer choices

- $F = m \times v$
- $F = p \times v$

- $F = m \times a$
- $F = p \times a$

15.

Q. How are isotopes the same and how are they different?

answer choices

- Same neutrons different atoms
- Same atoms,different neutrons

- In the nucleus
- Atoms are heavier than isotopes