

The end of the first semester
For the academic year 2018/2019

Question 1

45

Underline the correct answer :

1- What tool would a scientist use to view a tiny organism?

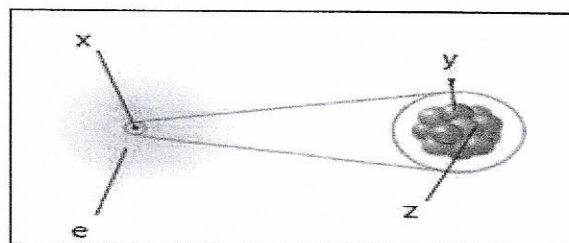
- * computer * test tube * compound light microscope * triple-beam balance

2- Which factor changes during an investigation?

- * constant * dependent variable * independent variable * variable

3- Which is a quantitative observation?

- * 15 m long * red color
* rough texture * strong smell



4- What is the Structure of (e) ?

- * an electron cloud * a neutron * a nucleus * a proton

5- Which type of elements represents almost 3/4 of the periodic table?

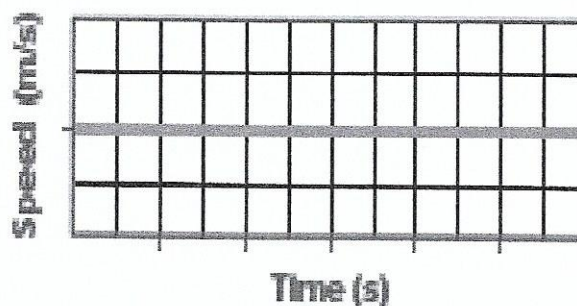
- * gases * metalloids * metals * nonmetals

6- Which does not have bias?

- * accurate records * equipment choice * funding source * hypothesis formation

7- The graph below represents the motion of a swimmer. Which sentence best describes the swimmer's motion?

- * The swimmer is at rest
* The swimmer is in constant motion.
* The swimmer's speed is changing.
* The swimmer is accelerating.



8- As the distance between two objects increases, the gravitational force between the objects:

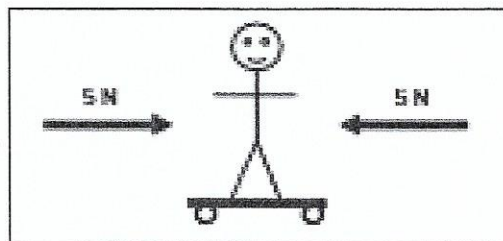
- * increases.
- * creates friction.
- * decreases.
- * stays the same

9- A plane is flying in a strong wind. The airplane is exerting 85 N to the East. The wind is exerting 100 N to the West. What is the net force?

- * 185 N, to the East
- * 185 N, to the West
- * 15 N, to the East
- * 15 N, to the West

10- A skateboarder is traveling at a constant speed to the left. He has the two forces act on him. Which sentence describes the motion of the skateboarder when the two forces act on him:

- * His motion stops.
- * His speed increases.
- * His speed decreases.
- * His motion stays the same



11- Which is the result of an object's motion?

- * a change in mass
- * a change in position
- * a change in reference point
- * a change in volume

12- Which physical property is NOT commonly used to separate mixtures?

- * magnetism
- * density
- * conductivity
- * solubility

13- What does not change in a physical change?

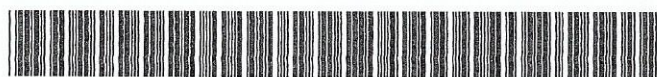
- * state of matter
- * temperature
- * total mass
- * volume

14- An ion contains 10 electrons, 12 protons, and 13 neutrons, what is the ion's charge?

- * 2 -
- * 1 -
- * 2+
- * 3+

15- What does the decimal number in an element key tell us?

- * atomic mass
- * atomic number
- * chemical symbol
- * state of matter



Question 2

30

First : Use the table below to answer questions(16 , 17):

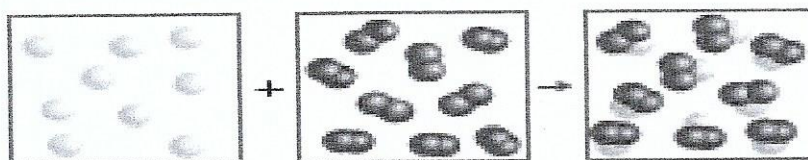
16- Which car had a negative acceleration?

17- Which car or cars had an acceleration greater than 2 m/s²?

car	Initial Speed (m/s ²)	Final Speed (m/s ²)	Time (s)
A	0	25	10
B	25	15	10
C	15	26	20
D	10	10	25

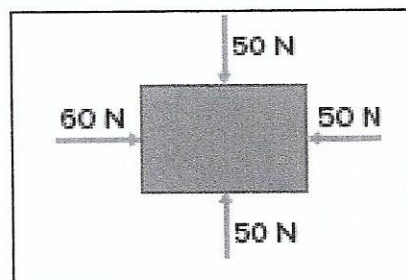
Second :Answer these questions:

18- Write how the picture shows conservation of mass.

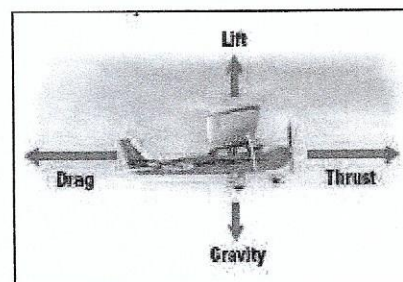


19-How can you make the chemical reaction between vinegar and baking soda faster?

20- The picture shows the forces acting on a box.
write the motion of the box.



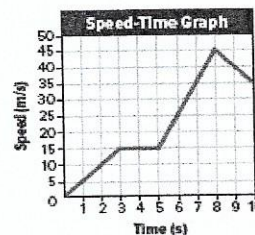
21- There are (4) forces acting on a plane .How do the forces change the plane's motion?



22– In which time period did the object have a constant speed?

23– Which word describes the motion from(8 to 10)seconds?

24– Choose and write the acceleration times in Fig.



25 – Write two types of movements that do not follow Newton's three laws?

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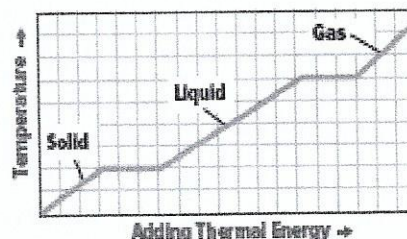
25

السؤال الثالث

First: The graph below shows temperature over time as a substance changes from solid to liquid to gas.

26– Write why the graph has horizontal lines.

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-



27– Match the first column to the second column:

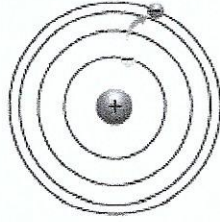
number	First column	Second column
(.....)	Melting point	1– The temperature when a substance changes from a liquid to a gas
(.....)	Boiling point	2– the mass per unit volume of a substance
(.....)	Density	3– the amount of space something takes up
(.....)	Volume	4– The temperature when a substance changes from a solid to a liquid
(.....)	Mass number	5–atoms of the same element that have different numbers of neutrons.
(.....)	Isotopes	6–the total of the number of protons and neutrons in an atom



Second :Answer these questions:

*** Use the picture below to answer questions(28 and 29)**

If your answer
was complete you
will get gift of 5
degrees



BONUS

28– Find the atomic model in the picture, and write its properties?

.....
.....

**29– How is this atomic model difference from the modern
atomic model?**

.....
.....

**30–Which reaction starts with a neutron and finishes in the creation of a proton and
a high–energy electron?**

.....
beta decay

31– What are the each horizontal rows in the modern periodic table called?

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32– Write why is mercury used in thermometers?

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انتهت الأسئلة
بالتوفيق والنجاح

