

Question 1

A chain reaction progresses when the average number of liberated neutrons that cause further fissions is

- A) zero.
- B) less than one.
- C) one or more.
- D) none of the above

Answer: <https://biology-forums.com/index.php?topic=1885885>

Question 2

A vertical vector of 3 units combined with a horizontal vector of 4 units has a resultant of

- A) 1 unit.
- B) 5 units.
- C) 7 units.

Answer: <https://biology-forums.com/index.php?topic=1884402>

Question 3

If a certain object emits visible waves rather than infrared waves its temperature is

- A) higher.
- B) lower.
- C) the same, temperature doesn't make any difference.

Answer: <https://biology-forums.com/index.php?topic=1885641>

Question 4

When an ideal gas is subjected to an adiabatic process

- A) no work is done on the gas.
- B) the temperature of the gas does not change.
- C) the internal energy of the gas does not change.
- D) all of the above
- E) none of the above

Answer: <https://biology-forums.com/index.php?topic=1885041>

Question 5

Compared with air pressure on the outside, air pressure inside an inflated stretched balloon is

- A) less.
- B) equal.
- C) greater.
- D) need more information

Answer: <https://biology-forums.com/index.php?topic=1884831>

Question 6

The fact that more radioactive particles are spewed from coal-fired power plants than nuclear fission reactors is evidence that

- A) coal is more radioactive than uranium.
- B) coal-fired plants have less shielding.
- C) coal-fired plants are more numerous.
- D) all of the above
- E) none of the above

Answer: <https://biology-forums.com/index.php?topic=1885923>

Question 7

The force required to maintain a constant velocity for an astronaut in free space is equal to

- A) zero.
- B) the mass of the astronaut.
- C) the weight of the astronaut.
- D) the force required to stop the astronaut.
- E) none of the above

Answer: <https://biology-forums.com/index.php?topic=1884339>

Question 8

Which of the following elements has the most mass?

- A) hydrogen
- B) iron
- C) lead
- D) uranium
- E) all have the same mass

Answer: <https://biology-forums.com/index.php?topic=1884658>

Question 9

Control is maintained in a nuclear reactor by control rods that

- A) absorb excess neutrons.
- B) emit fast neutrons.
- C) both of these
- D) neither of these

Answer: <https://biology-forums.com/index.php?topic=1885898>

Question 10

What did Robert Brown see in his microscope?

- A) straight-line motion
- B) circular motions
- C) parabolic motions
- D) random motions

Answer: <https://biology-forums.com/index.php?topic=1884637>

Question 11

The operation of a cloud chamber relies on

- A) magnetization.
- B) evaporation.
- C) acceleration.
- D) polarization.
- E) condensation.

Answer: <https://biology-forums.com/index.php?topic=1885845>

Question 12

Why electrons don't spiral into atomic nuclei is best explained by their

- A) particle nature.
- B) wave nature.
- C) both of these
- D) neither of these

Answer: <https://biology-forums.com/index.php?topic=1885775>

Question 13

In order for an atom to decay to an element that is one greater in atomic number, it can emit

- A) one alpha particle and 3 beta particles.
- B) one positron and 2 beta particles.
- C) one beta particle.
- D) all of the above
- E) none of the above

Answer: <https://biology-forums.com/index.php?topic=1885869>

Question 14

Strictly speaking, to weigh less in the Northern Hemisphere, you should move to a location farther

- A) north (toward the pole).
- B) south (toward the equator).
- C) east.
- D) west.

Answer: <https://biology-forums.com/index.php?topic=1884184>

Question 15

The probability cloud for the electron in the hydrogen atom has an average radius

- A) quite different from the radius predicted by Bohr.
- B) in agreement with the orbital radius of Bohr.
- C) as yet not accurately measured.

Answer: <https://biology-forums.com/index.php?topic=1885791>

Question 16

If the Sun collapsed to a black hole, Earth's gravitational attraction to it would be

- A) more.
- B) less.
- C) the same.

Answer: <https://biology-forums.com/index.php?topic=1884564>

Question 17

When you're ready for the hottest sips of coffee, add cream

- A) right away.
- B) at any time.
- C) when you are ready to drink the coffee.

Answer: <https://biology-forums.com/index.php?topic=1884937>

Question 18

The type of lens that brings parallel light rays together is a

- A) converging lens.
- B) diverging lens.
- C) combination of converging-diverging lens.

Answer: <https://biology-forums.com/index.php?topic=1885537>

Question 19

Two charges that are separated by one meter exert 1-N forces on each other. If the charges are pushed together so the separation is 25 centimeters, the force on each charge will be

- A) 1 N.
- B) 2 N.
- C) 4 N.
- D) 8 N.
- E) 16 N.

Answer: <https://biology-forums.com/index.php?topic=1885205>

Question 20

A red apple will appear black when illuminated with

- A) blue light.
- B) cyan light.
- C) yellow light.
- D) magenta light.
- E) none of the above

Answer: <https://biology-forums.com/index.php?topic=1885435>