



FOR GOD AND COUNTRY

## ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

- **Subject- Physics** Answers of Worksheet- 16 **Class – IX**
- **Date-16.04.2020** **1<sup>st</sup>Term**
- **Topic – Newton's Third Law of Motion**

- Question 1

Q. When a heavy football player and a light one run into each other, who exerts more force?  
answer choices

They are equal

- Question 2

Q. When you hold an apple above your head, how many force pairs act on the apple?  
answer choices

2

Question 3

Q. Suppose two carts, one twice as massive as the other, fly apart when the compressed spring that joins them is released. How fast does the heavier cart roll compared with the lighter cart?  
answer choices

half as fast

- Question 4

Q. A bus hits a bug and the bug splatters on the windshield, which force is greater?  
answer choices

They're the same

- Question 5

Q. When Ronda Rousey got kicked in the face, What is the interaction pair?  
answer choices

The foot and the face

- Question 6

Q. Newton's third law states that any action will have a(n) \_\_\_\_\_ and \_\_\_\_\_ reaction  
answer choices

Equal and opposite

- Question 7

Q. A book rests on a table. The force of gravity pulls down on the book with a force of 20 newtons. What prevents the books from accelerating downward at  $9.8 \text{ m/sec}^2$   
answer choices

The table presses back up on the book with an equal and opposite force of 20 newtons.

Question 8

Q. You hit a wall with a stick. The equal but opposite reaction is \_\_\_\_\_

answer choices

the wall pushes against the stick

- Question 9

Q. Friction and gravity are both examples of a force.

answer choices

True

- Question 10

Q. Suppose two carts, one twice as massive as the other, fly apart when the compressed spring that joins them is released. How fast does the lighter cart roll compared with the heavier cart?

answer choices

twice as fast

- Question 11

Q. A science book with a mass of 2.8 kg is pushed along a table with a net force of 1 N. What is the book's acceleration?

answer choices

0.36 m/s<sup>2</sup>

- Question 12

Q. When the same force is applied to both the male African elephant and the female Asian elephant, their acceleration is different. Why?

answer choices

Male and female elephants have different heights.

- Question 13

Q. This equation goes with which law?

answer choices

Newton's second law of motion

- Question 14

Q. What is the 3rd Law of Motion?

answer choices

For every action, there is an equal and opposite reaction.

- Question 15

Q. Who came up with the 3rd Law of Motion?

answer choices

Sir Isaac Newton

Teacher- PiyaliHalder