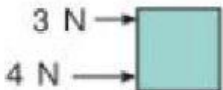
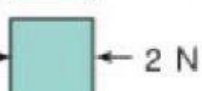


1. What must we know when we want to find a resultant force?
  - a. A magnitude of force
  - b. A direction of force
  - c. A shape of an object
  - d. Both a. and b.
2. Which tool is used to measure the magnitude of force?
  - a. A spring scale
  - b. A measuring cylinder
  - c. A measuring tape
  - d. A tapeline
3. Which is the unit of force?
  - a. Gram
  - b. Newton
  - c. Kilogram
  - d. Kilometer
4. If the resultant force is zero, what will happen to the object?
  - a. The object will move forward.
  - b. The object will move fast.
  - c. The object will move slowly.
  - d. The object will not move.
5. If we use two cows to pull a cart, how many resultant force will there be?
  - a. 1 force
  - b. 2 forces
  - c. 3 forces
  - d. 4 forces

6. In which diagram will the object not move?

- a. 
- b. 
- c. 
- d. 

7. From Question 6, in which will the object move to the right?
  - a. a. and b.
  - b. b. and c.
  - c. c. and d.
  - d. a. and d.

8. A tow truck exerted 1,000 N to drag a car. A force of 100 N was also exerted to push the car before it started moving.

If the extra force was not exerted, how much force would the tow truck need to move the car?

- a. 100 N
  - b. 900 N
  - c. 1,000 N
  - d. 1,100 N
9. Team A played tug of war with Team B. Each team had 3 players. Each player of Team A exerted 500 N. How much force should each player of Team B exert so that they can win?
  - a. 300 N
  - b. 400 N
  - c. 500 N
  - d. 600 N

10. From Question 9, what is the resultant force of Team B?

- a. 900 N
- b. 1,200 N
- c. 1,500 N
- d. 1,800 N

11. Which of the following is correct?

- a. An object that is not moving has the highest resultant force.
- b. A resultant force makes an object to change its shape.
- c. A resultant force is the sum of all forces that act on an object.
- d. A and B push a cupboard in the same direction. The resultant force is zero.

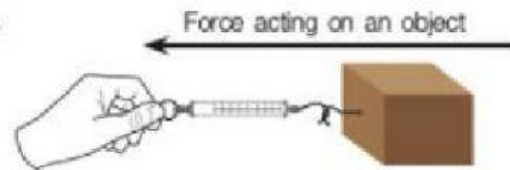
12. Which does not use resultant force?

- a. A swing
- b. Rowing a boat
- c. A syringe
- d. A suspension bridge

13. When will there be a friction force?

- a. When an object is not moving on water.
- b. When an object is moving.
- c. When an object is hanging on a tree.
- d. When an object is floating in the air.

14.



From the picture, what is the direction of the friction force?

- a. To the front
- b. To the left
- c. To the back
- d. To the right

15. Which does not link to friction force?

- a. The type of surface
- b. The weight of an object
- c. The size of an object
- d. The color of an object

16. Why should we use tiles with rough surface on bathroom floor?

- a. They are beautiful.
- b. They are easy to clean.
- c. They are not slippery when wet.
- d. They lower friction force.

17. Which of these activities need the highest friction force?

- a. Mountain climbing
- b. Swimming
- c. Playing football
- d. Cycling

18. Which of these has an increase of friction force?
- The grooves on the sole of a sports shoe.
  - A round cycling helmet
  - A trolley for moving things
  - A lubricant on a door hinge
19. Which surface give the highest friction force when we drag a bag over it?
- Plywood
  - Sand
  - Glass
  - Tile
20. Which can move the furthest when we put equal forces in the same direction?
- An object with smooth surface moving on a smooth floor
  - An object with smooth surface moving on a rough floor
  - An object with rough surface moving on a smooth floor
  - An object with rough surface moving on a rough floor
21. Why are there many accidents on the road when it rains?
- The rain makes the tires to widen.
  - The rain makes the roads sticky.
  - The rain shuts off the engines.
  - The rain makes the roads slippery.

Read and answer questions 22-24.

The table shows the distances that a box moved on different types of floors when a force was exerted on it.

| Types of floor | How far the box moves |
|----------------|-----------------------|
| A              | 2 m                   |
| B              | 3 m                   |
| C              | 2.5 m                 |
| D              | 4 m                   |

22. Which Floor gives the lowest friction force?
- Floor A
  - Floor B
  - Floor C
  - Floor D
23. What should Floor D be?
- Sand
  - Glass
  - Grass field
  - Dirt road
24. Arrange the floors from the highest to the lowest friction forces.
- $A > B > C > D$
  - $D > C > B > A$
  - $A > C > B > D$
  - $D > B > C > A$
25. Which of these is the use of lubricants?
- Lower an energy
  - Increase an energy
  - Lower the friction force
  - Increase the friction force

|        |        |
|--------|--------|
| Part 3 |        |
| I got  | Out of |
|        | 25     |