

MY SO PRACTICE TEST

DIVISION B - MIDDLE SCHOOL, GRADES 6-9

PRACTICE TEST

Instructions

- There are 25 questions on this test.
- You have 50 minutes to complete this test.
- You may write your answers directly in the test.
- You may use any notes or resources you have created or collected.
- You may use a calculator and scratch paper if necessary.
- Good Luck!

Test Questions

1. This force slows a plane down. It is caused by air friction.
 - a. Drag
 - b. Lift
 - c. Thrust
 - d. Weight
2. When an airplane is taking off, lift is _____ than weight.
 - a. greater than
 - b. less than
 - c. the same as
3. This is an engine-powered force that pushes the plane forward through the air.
 - a. Drag
 - b. Lift
 - c. Thrust
 - d. Weight
4. This force is created when air rushes over the top of the wings and pushes up on the wings raising the plane skyward.
 - a. Drag
 - b. Lift
 - c. Thrust
 - d. Weight

5. A force that is always directed toward the center of the Earth.
 - a. Drag
 - b. Gravity
 - c. Lift
 - d. Thrust
6. This is the main part of a glider or plane.
 - a. Aircraft
 - b. Engine
 - c. Fuselage
 - d. Wings
7. These provide lift for an aircraft.
 - a. Engines
 - b. Forces
 - c. Fuselages
 - d. Wings
8. What is the name of the force that tries to hold an aircraft back?
 - a. Drag
 - b. Lift
 - c. Thrust
 - d. Weight
9. Whose principle is used to describe why flight is possible?
 - a. Bernoulli
 - b. Guidry
 - c. Newton
 - d. Pascal
10. Bernoulli's Principle states that the air
 - a. has no effect on the wing
 - b. moves faster over the wing which generates lift
 - c. moves faster under the wing which generates lift
 - d. moves slower over the wing which generates lift
11. Which of the following is NOT one of the three primary movements of an aircraft?
 - a. pitch
 - b. roll
 - c. sway
 - d. yaw
12. Roll is...
 - a. sideways tilting of the fuselage
 - b. the forward acting force which propels the aircraft through the air
 - c. the main body of a plane
 - d. up or down altitude of the nose of the plane

13. An airfoil is...
- a. the ability of an object to rise when placed in a fluid
 - b. an invisible mixture of gasses, which makes up the atmosphere
 - c. resistance or frictions that slow down an object when it moves through a fluid
 - d. an object shaped/designed to obtain maximum lift when moving through the air
14. What do parachutes rely on to fall to the ground more slowly?
- a. drag
 - b. gravity
 - c. lift
 - d. thrust
15. The faster air moves, the lower the _____.
- a. compression
 - b. density
 - c. pressure
 - d. speed
16. If the elevator is up, the plane will bank_____.
- a. down
 - b. left
 - c. right
 - d. up
17. _____are made for faster and longer distances.
- a. fuselages
 - b. jet engines
 - c. planes
 - d. propellers
18. The purpose of flaps is to.....
- a. decrease drag
 - b. increase drag
 - c. increase gravity
 - d. increase thrust
19. _____is the side-to-side movement of the nose of an airplane.
- a. pitch
 - b. roll
 - c. thrust
 - d. yaw
20. The elevator is located on the
- a. fuselage
 - b. horizontal stabilizer
 - c. vertical stabilizer
 - d. wing

21. The purpose of the tail of the airplane is to....
- a. help in landing
 - b. provide drag
 - c. provide lift
 - d. provide stability
22. Birds flapping their wings to stay in the air is an example of
- a. Newton's 1st Law
 - b. Newton's 2nd Law
 - c. Newton's 3rd Law
23. In a football game, two players tackle each other so hard that they both fly in opposite directions after they hit each other. What law of motion is this an example of?
- a. Newton's 1st Law
 - b. Newton's 2nd Law
 - c. Newton's 3rd Law
24. If you want to increase the acceleration of a baseball when you throw it, what must you increase to make this happen?
- a. Acceleration
 - b. Force
 - c. Newton's 2nd Law
 - d. Mass
25. The ailerons are located on the
- a. fuselage
 - b. horizontal stabilizer
 - c. inner wing
 - d. outer wing

ANSWER KEY

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|-----|----------|-----|----------|
| 1. | A | 15. | C |
| 2. | A | 16. | D |
| 3. | C | 17. | B |
| 4. | B | 18. | B |
| 5. | B | 19. | D |
| 6. | C | 20. | B |
| 7. | D | 21. | D |
| 8. | A | 22. | C |
| 9. | A | 23. | C |
| 10. | B | 24. | B |
| 11. | C | 25. | D |
| 12. | A | | |
| 13. | D | | |
| 14. | A | | |