<u>Directions:</u> Choose the best answer to each question. You have 3 total attempts at this quiz today

Choose the word that fits into the blank space appropriately



1) T	hrust
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- 2) \_\_\_\_\_ Lift
- 3) \_\_\_\_\_ Weight
- 4) \_\_\_\_\_ Drag

- a) 1
- b) 2
- c) 3
- d) 4

Multiple Choice: Choose only the best answer to each question.

5) In the picture of a wing seen below. The air travel fastest ......



Upper surface path length

Lower surface path length

- a) Below the wing
- b) Above the wing
- c) In front of the wing
- d) The same above and below the wing
- 6) In the picture of a wing seen below. The wing creates lift because there is a difference in air pressure around the wing. The area of High pressure is located .........



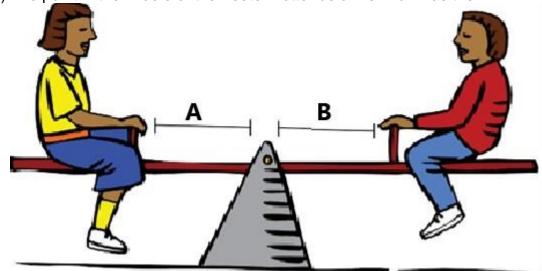
Upper surface path length

## Lower surface path length

- a) Below the wing
- b) Above the wing
- c) In front of the wing
- d) The same above and below the wing
- 7) Lift can overcome the effects of gravity.
  - a) True
  - b) False

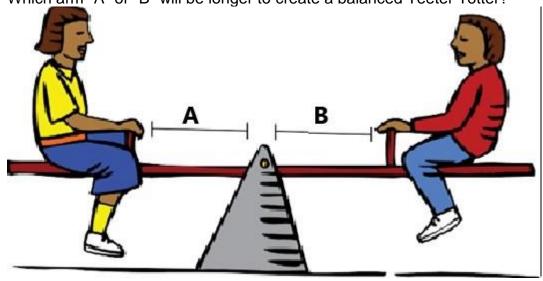
- 8) The shape of the wing has no affect on how much lift is produced.
  - a) True
  - b) False
- 9) According to Isaac Newton. For every action, there is ......
  - a) An equal and opposite reaction
  - b) An unequal and opposite reaction
  - c) There is someone who does not like the action
  - d) Gravitational pull on an object

10) The point in the middle of the Teeter Totter below is known as the ......



- a) Fulcrum
- b) Axis
- c) Middle
- d) No man's land

11) If Bill on the right in the below picture weighs 140 lbs, and Cathy on the left weighs 120 lbs. Which arm "A" or "B" will be longer to create a balanced Teeter Totter?



- a) A
- b) B
- c) neither
- 12) Which letter in the below picture identifies the location of the Center of Gravity for a balance airplane?



- a) A
- b) B
- c) C
- d) D
- 13) It matters where you place heavy luggage inside a small airplane due to ........
  - a) The space available to store the luggage
  - b) The load limits of the airplane
  - c) The balance of the airplane around the engine compartment
  - d) The balance of the airplane around the Center of Gravity

14) Why do you believe jet engines on most commercial airliners are usually built to be suspended from the wings?



- a) It is a good location for the engines
- b) It makes it easier to keep up maintenance
- c) It creates a more stable airplane
- d) It is more attractive in this design
- 15) Carrying passengers and cargo in a small airplane has little effect on the airplanes weight and balance characteristics.



- a) True
- b) False