

September 5, 2019
Grades K & 1



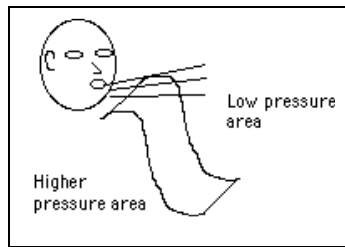
Homework Questions

Circle the correct answer:

1. Isaac Newton was born on what holiday? A. Thanksgiving B. Easter C. Christmas
2. Who raised Isaac Newton? A. His aunt B. His parents C. His Grandmother
3. Newton had ideas about motion, which he called what? A. The three laws of gravity B. The three laws of stillness C. The three laws of motion
4. Which law is this? *Objects in motion tend to stay in motion unless acted upon by an outside force. It also says that objects at rest tend to stay at rest unless acted upon by an outside force.*
A. first B. second C. third
5. Which law is this? *When an object is acted upon by a force, it will either start to move, speed up or slow down, or change direction.* A. first B. second C. third
6. Which law is this? *For every action, there is an equal and opposite reaction.*
A. first B. second C. third
7. Which law does this example illustrate? A water bottle rocket is launched by pumping air into the bottle to put it under a lot of pressure, then the clasp that is holding it in place is released—the reaction is that the bottle is shot up into the air. A. first B. second C. third



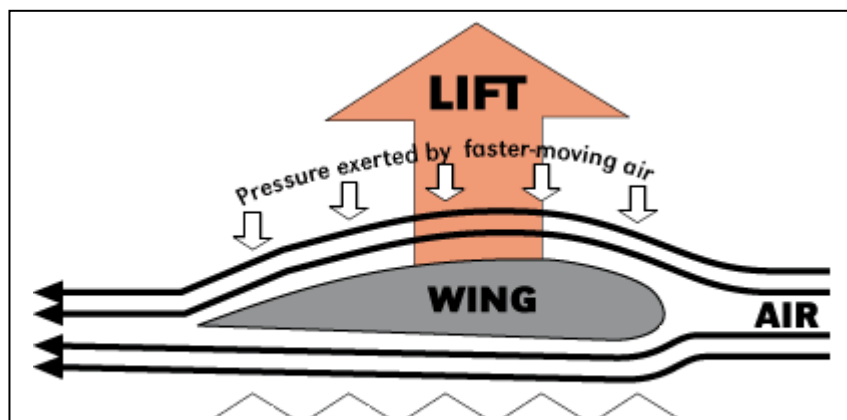
September 12, 2019
Grades K & 1



Homework Questions

Circle the correct answer:

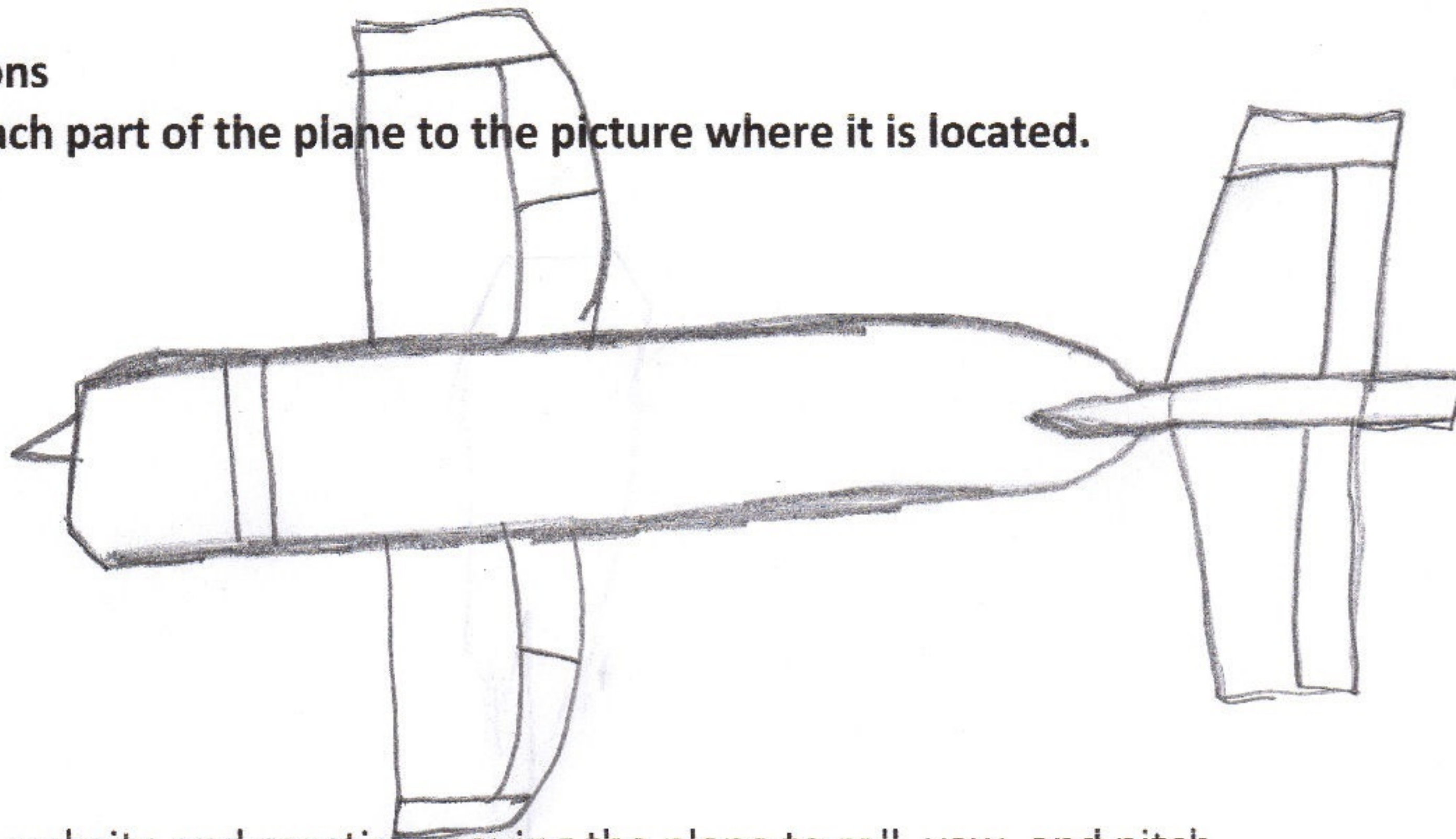
1. The four forces of flight are: **A. lift, gravity, thrust, speed** **B. Lift, weight, thrust, mass** **C. lift, weight, thrust, drag**
2. The upward force on a plane made possible by bernoulli's principle is: **A. thrust** **B. drag** **C. lift** **D. weight**
3. The downward force on a plane caused by gravity is: **A. mass** **B. gravity** **C. weight** **D. drag**
4. The forward force on a plane usually caused by the plane's engines is called: **A. lift** **B. thrust** **C. weight** **D. drag**
5. The backward forces on a plane caused by air resistance is called: **A. lift** **B. weight** **C. thrust** **D. drag**
6. Bernoulli's principle states that when air hits the wing of a plane, it travels more: **A. slowly** **B. quickly** over the top of the wing. This creates a lower pressure than is under the wing. This creates **A. drag** **B. lift** to get the airplane off the ground.



Homework Questions

Draw a line from each part of the plane to the picture where it is located.

1. nose
2. wing
3. fuselage
4. aileron
5. tail
6. rudder
7. fin
8. elevator



Go to the following website and practice moving the plane to roll, yaw, and pitch
<https://www.youtube.com/watch?v=pQ24NtnaLI8>

9. A **roll** moves the plane side to side by adjusting the

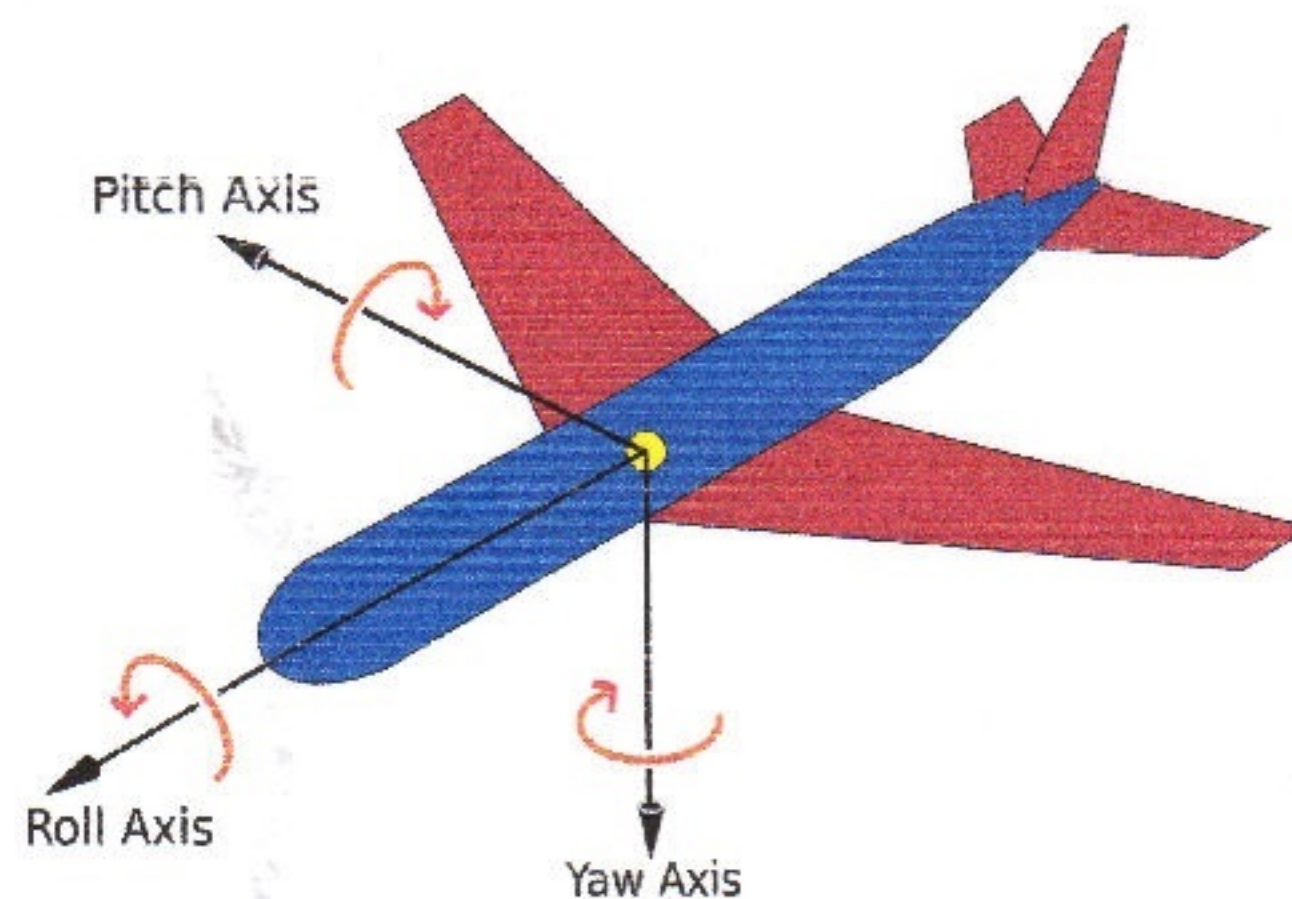
A. tail B. elevator C. aileron

10. **Yaw** turns the plane right and left by adjusting what?

A. wing B. aileron C. rudder

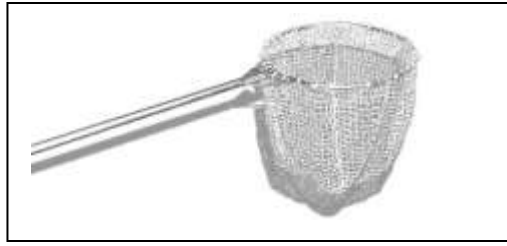
11. **Pitch** tips the nose of the plane up and down by adjusting what?

A. fuselage B. Fin C. elevator



September 26, 2019
Grades K & 1

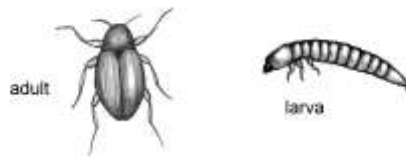
Ecology Homework Questions



1. Can you see a macro invertebrate without a microscope? A. yes B. no
2. Does an invertebrate have a backbone? A. yes B. no
3. Why do scientists study the number of macro invertebrates in a stream?
A. to see what kind of creatures live there B. to determine the health of the stream
4. Which group of macro invertebrates can live in nasty water?
A. one B. two C. three
5. Would you find a midge in excellent quality water? A. yes B. no



6. Would you find a riffle beetle in polluted water? A. yes B. no



7. Would you find a stonefly in polluted water? A. yes B. no



October 3, 2019
Grades K & 1

Homework Questions

Circle the correct answers below:



1. Kites have been used for many different things. Two examples are:

A. spying on friends & pulling sleds B. signaling, fishing

2. The towing line attached to a kite is called the:

A. tethering string B. frame C. bridle

3. The structural part of the kite to which the sail is attached is the:

A. sail B. frame

4. A kite is heavier than air, so there needs to be what type of force?

A. drag B. thrust C. lift

5. Most of the force on a kite comes from what?

A. person pulling it B. wind

6. Draw a picture of your favorite shape and kind of kite below:

October 10, 2019
Grades K & 1

Homework Questions

Circle the correct answers below:



1. On the paragraph titled 'short history of flight', which group of people made kites around 350 BC? **A. French B. Americans C. Chinese**
2. What type of flying toy is a form of glider and sails on air currents?
A. airplane B. helicopter C. kite
3. What did the Montgolfier brothers build? **A. blimp B. hot air balloon**
4. What were the three passengers in the hot air balloon that was launched in 1783? **A. horse, mule, sheep B. horse, pig, dog C. sheep, rooster, duck**
5. What were the names of the brothers that in 1903, created a machine that flew. **A. Joseph & Jacques Montgolfier B. Orville & Wilbur Wright**
6. Gliding flight is accomplished with A. a lot of movement of the wings B. little or no movement of the wings
7. True flight is accomplished only by **A. birds, snakes and insects B. birds, fish, and bats C. birds, insects, bats**
8. How many miles per hour is the fastest recorded speed of a helicopter?
A. 50 mph B. 248 mph

