

Flight Review Sheet

1. Hot air rises. Hot air balloons use this principle to fly. The hot air and the expansion of the balloon cause a force called LIFT. The lift needs to be greater than gravity in order for the balloon to fly.
2. The force acting downward (toward the earth) is called GRAVITY.
3. Gravity depends on if an object has MASS.
4. The lighter the object, the less lift you need. This is why flying objects should be made light (e.g. planes).
5. Air has WEIGHT. An inflated balloon weighs more than a deflated balloon.
6. Living things use the wind to create lift (e.g. dandelion seeds).
7. The study of Air in motion is called aerodynamics.
8. Air expands when heated and contracts when cooled.
9. Air takes up space, air can be compressed, air can insulate.
10. Daniel Bernoulli's principle says that the faster the air moves, the lower the pressure is.
11. Moving air has less pressure than stationary air.
12. As airplanes fly through the sky, the shape of the wing causes air to flow faster over the top of the wing. Therefore, there is lower pressure on the top of the wing. The high pressure at the bottom creates lift.
13. The greater the area of the wing, the greater the lift. Pilots can adjust the rate of ascent or descent by changing the area (e.g. flaps)

