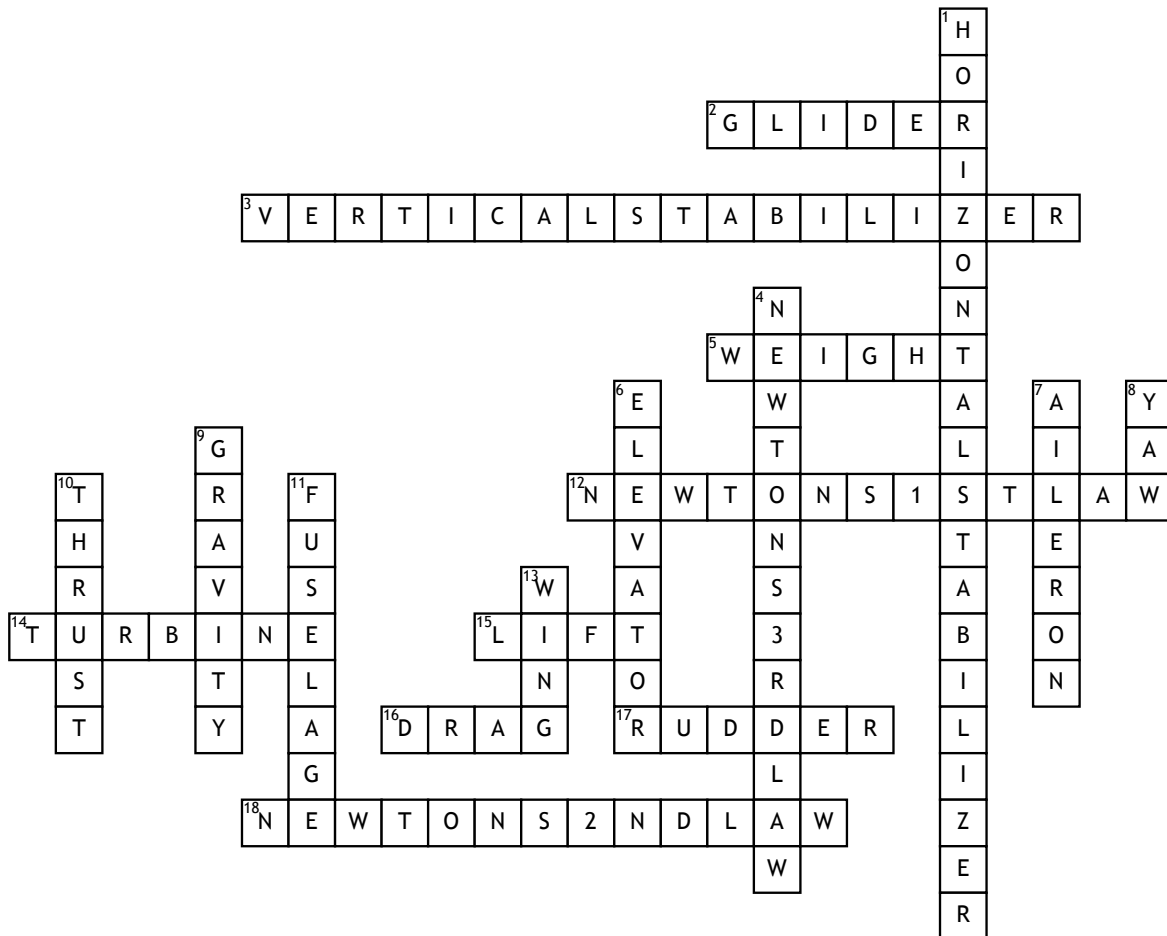


# Lesson 4.2 Key Term Crossword



## Across

2. An airplane with no attached source of thrust.
3. A vertically oriented airfoil at the back of an airplane that resists left and right movements.
5. The force generated by the gravitational attraction of the earth on the airplane. Lift must be equal to weight in order to sustain flight.
12. Objects at rest stay at rest and objects in motion stay in motion unless an external force is applied. It is known as the law of inertia.
14. A rotary engine that extracts energy from fluid turning blades.
15. The force that directly opposes the weight of an airplane and holds the airplane in the air.

16. Resistance of the air (technically a fluid) against the forward movement of an airplane.

17. A controlling surface on an aircraft's tail that regulates yaw.
18. The relationship among an object's mass (m), acceleration (a), and an applied force (F), is Force equals mass times acceleration ( $F = ma$ ).

## Down

1. An airfoil (usually at the back of an airplane) that resists up and down changes in motion.
4. For every action there is an equal and opposition reaction.
6. The controlling surface that regulates an aircraft's pitch.
7. The controlling surface that regulates an aircraft's roll.

8. A side-to-side motion of the nose of the aircraft.

9. The force that attracts a body toward the center of the earth or toward any other physical body having mass.
10. A force applied to a body to propel it in a desired direction. The force which moves an aircraft through the air.
11. The central body of an aircraft where wings and stabilizers are attached.
13. The major horizontal surface on an airplane that provides lift.