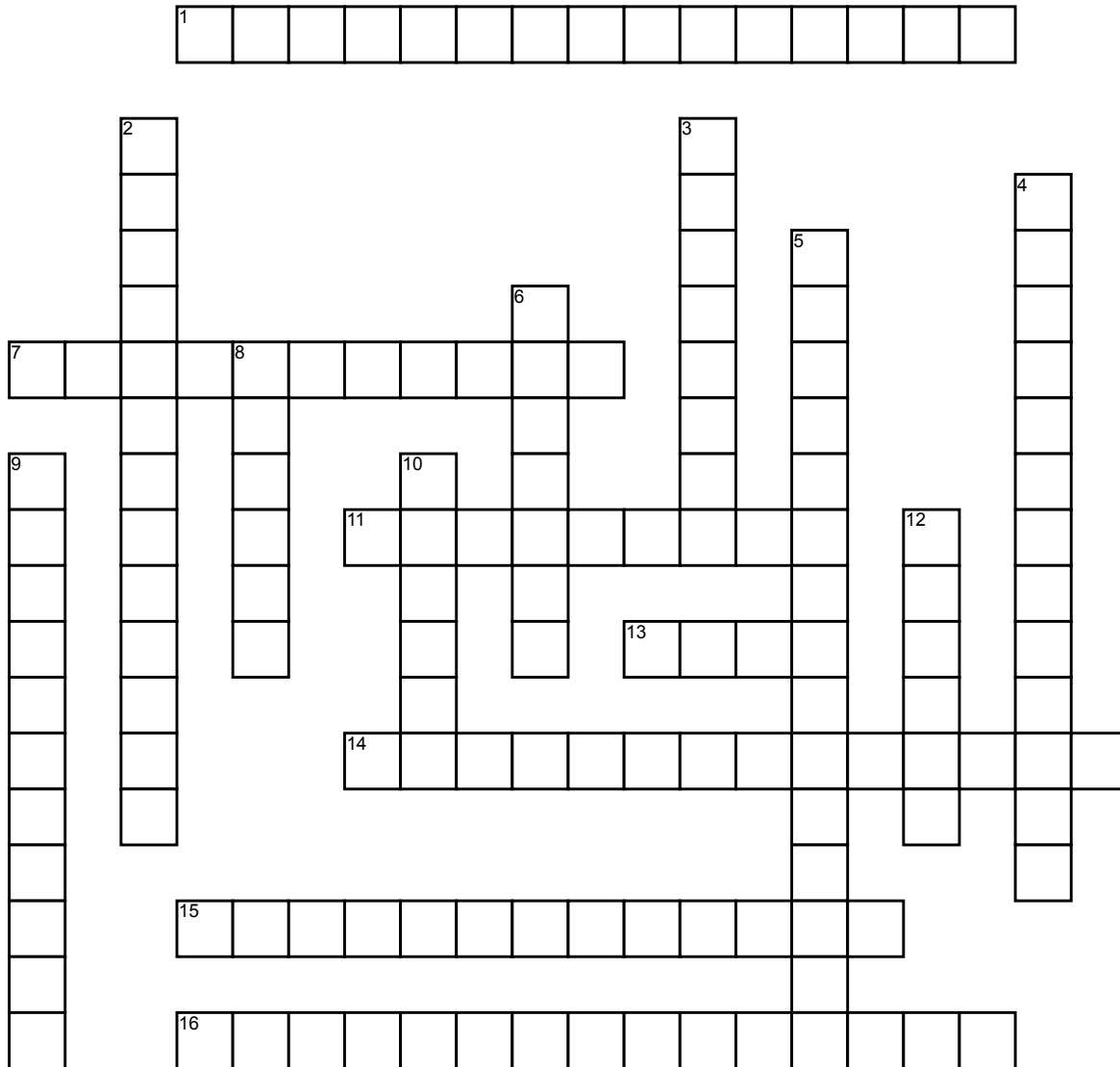


Aerodynamics - forces



Across

1. coefficient of lift x dynamic pressure x area

7. That part of the drag on an aerofoil which arises from the development of lift.

11. This scientist's principle states that total pressure = static pressure + dynamic pressure

13. In straight and level flight, this force opposes weight

14. the pressure of a fluid on a body when the latter is at rest relative to it.

15. The angle between the line of the chord of an aerofoil and the relative airflow.

16. The increase in a moving fluid's pressure over its static value due to motion

Down

2. This is a measure of the airfoil's efficiency.

3. a structure with curved surfaces designed to give the most favourable ratio of lift to drag in flight

4. This results when an object is moved through a fluid medium. It is a combination of form drag, skin friction drag and interference drag

5. Slots, flaps, slats are all examples of these.

6. A type of flow which is taking place along constant streamlines, without turbulence.

8. The extent of curvature of a section of an aerofoil.

9. When the succeeding molecule of a fluid follows the same path as the preceding molecule

10. A force caused by the pull of gravity on mass

12. This is the propulsive force of a jet or rocket engine.