

Forces in Water and Air Maze

Grade 5 scientists explore how forces act on living things and objects moving through water and air ([Outcome](#), [Guiding question](#)). This maze hides eight key words from that investigation: thrust, drag, lift, weight, buoyant, float, sink, and fluid. As you trace the path from start to finish, collect these words and think about how each one describes a push or pull force at work ([Knowledge](#), [Knowledge](#), [Knowledge](#)).

How to play

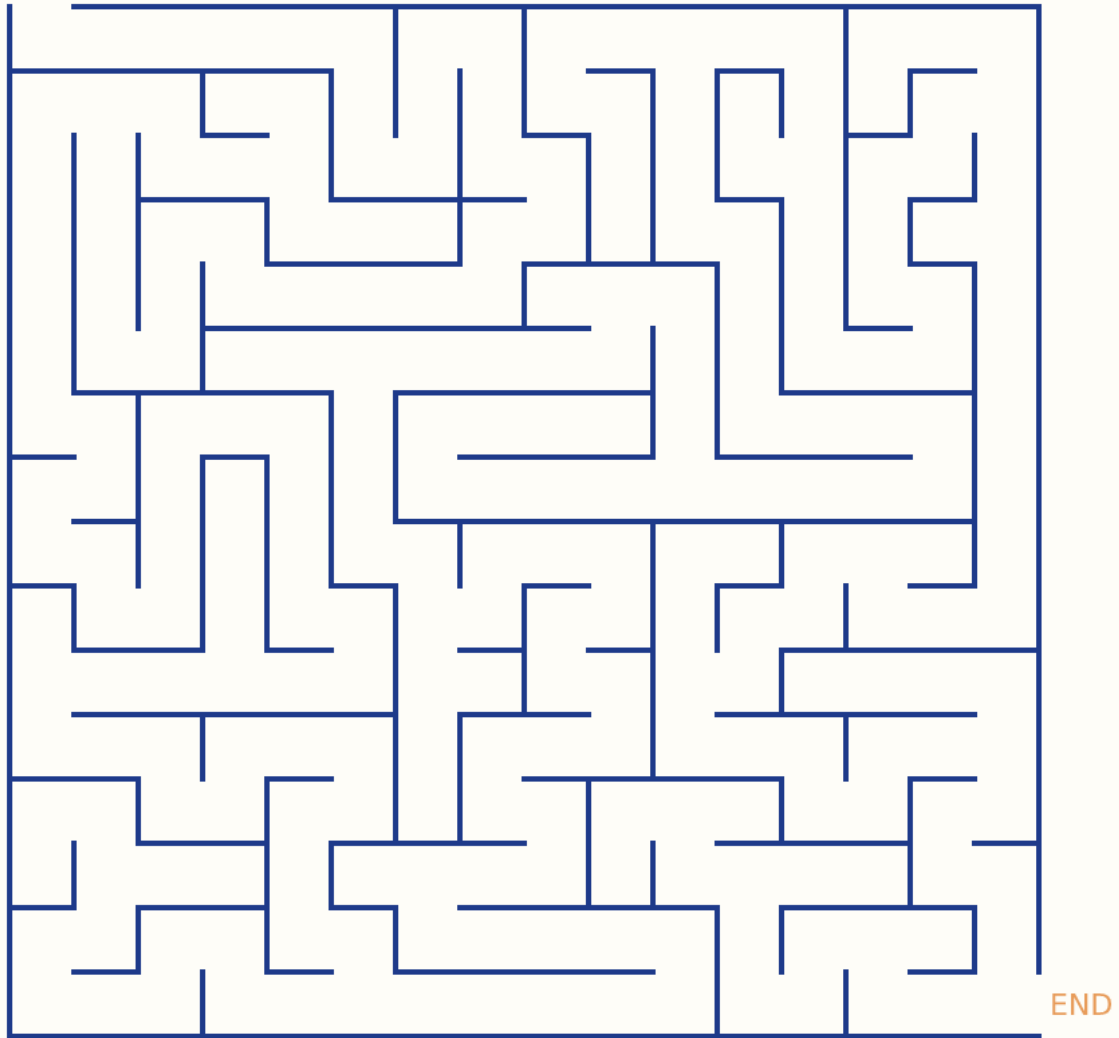
Start at the entrance of the maze and find your way to the exit using only right, left, up, and down moves along the open path. Do not cross the walls. As you move through the maze, watch for the eight hidden vocabulary words listed above. On a separate sheet, write each word down in the order you find it, then next to each one, write whether it names a force in air, a force in water, or both.

Once you reach the exit, use your list to answer these questions:

1. Which two words describe forces that oppose each other during flight ([Knowledge](#))?
2. Which two words describe forces that oppose each other in water ([Knowledge](#))?
3. If the buoyant force on an object is greater than its weight, does the object float or sink ([Knowledge](#))?

The maze

START

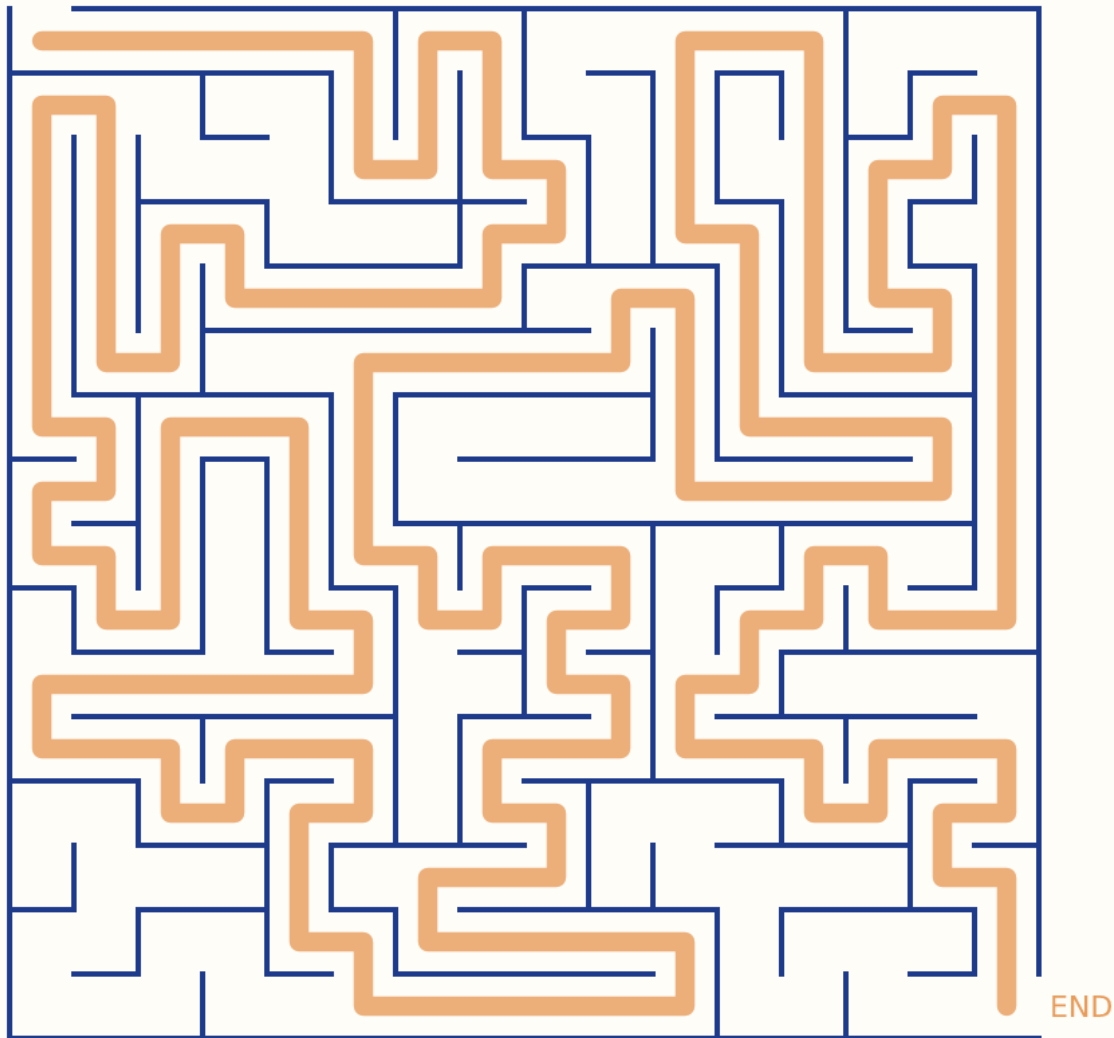


Maze

Answer key

Forces in Water and Air Maze (solution)

START



END

Maze solution

Path: right 5, down 2, right 1, up 2, right 1, down 2, right 1, down 1, left 1, down 1, left 4, up 1, left 1, down 2, left 1, up 4, left 1, down 5, right 1, down 1, left 1, down 1, right 1, down 1, right 1, up 3, right 2, down 3, right 1, down 1, left 5, down 1, right 2, down 1, right 1, up 1, right 2, down 1, left 1, down 2, right 1, down 1, right 5, up 1, left 4, up 1, right 2, up 1, left 1, up 1, right 2, up 1, left 1, up 1, right 1, up 1, left 2, down 1, left 1, up 1, left 1, up 3, right 4, up 1, right 1, down 3, right 4, up 1, left 3, up 3, left 1, up 3, right 2, down 5, right 2, up 1, left 1, up 2, right 1, up 1, right 1, down 8, left 2, up 1, left 1, down 1, left 1, down 1, left 1, down 1, right 2, down 1, right 1, up 1, right 2, down 1, left 1, down 1, right 1, down 2