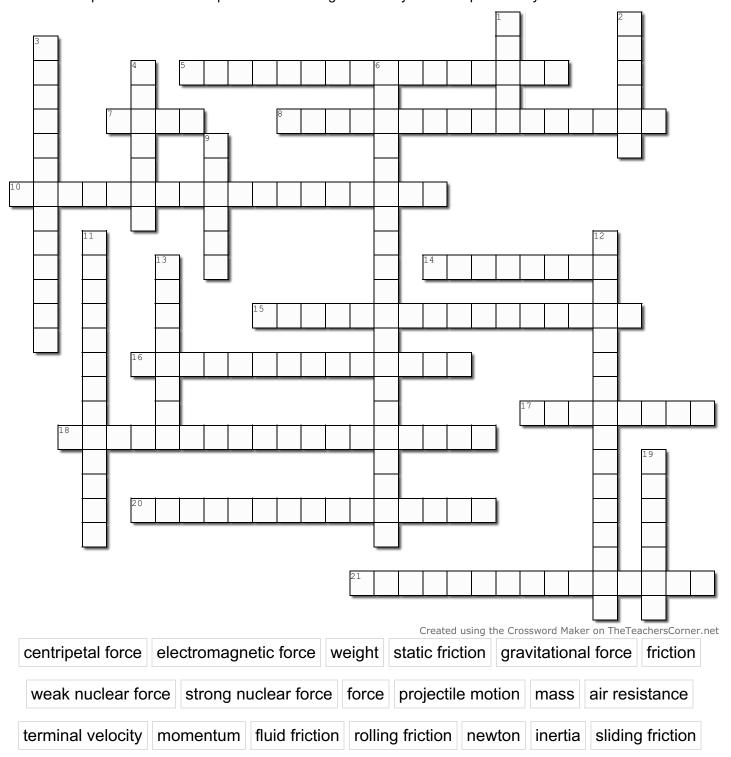
## **Chapter 12 Vocabulary Introduction**

Complete the crossword puzzle below using vocabulary from Chapter 12 in your online textbook.



gravity net force

## **Across**

- **5.** a powerful attractive force that acts over a short range
- **7.** a measure of the inertia of an object, which depends on the amount of matter the object contains
- **8.** the curved path of an object in free fall after it is given an initial forward velocity
- **10.** an attractive force that acts between any two objects
- **14.** the overall force acting on an object after all the forces are combined
- **15.** the constant velocity of a falling object when the force of air resistance equal the force of gravity
- **16.** friction force that acts on objects that are not moving
- **17.** the product of an object's mass and its velocity
- **18.** the powerful attractive force that binds proton and neutrons together in the nucleus
- **20.** force that opposes the direction of motion of an object as it slides over a surface
- **21.** the friction force that acts on rolling objects

## **Down**

- 1. a push or a pull that acts on an object
- 2. the SI unit for force; causes a 1 kg mass to accelerate at a rate of 1m/s<sup>2</sup>
- **3.** a friction force that opposes the motion of an object through a fluid
- **4.** the attraction between any two objects because of their masses
- **6.** a force associated with charged particles, which has two aspects, electric force and magnetic force
- **9.** the force of gravity acting on an object
- **11.** fluid friction acting on an object moving through the air
- **12.** a force that continuously changes the direction of an object to make it move in a circle
- **13.** force that opposes the motion of objects that touch as they move past each other
- **19.** the tendency of an object to resist a change in its motion