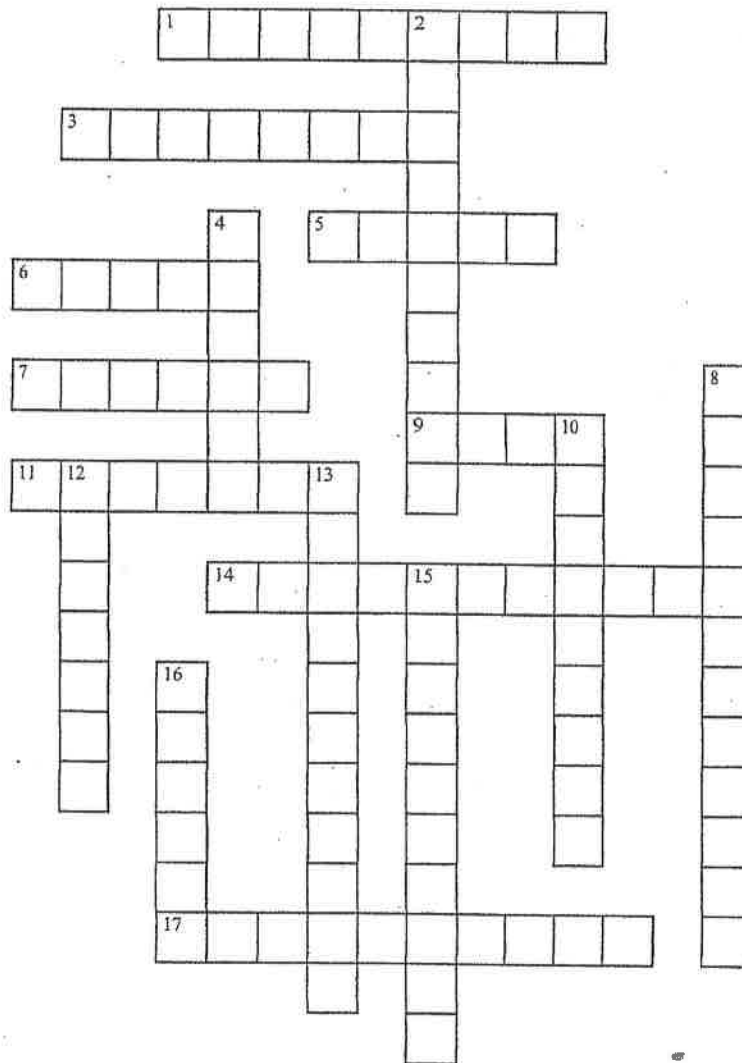


## Chapter 9 (INTRODUCTION) Vocabulary Crossword Puzzle.

Using your textbook, find the vocabulary word that matches the clue given and write it in the crossword puzzle.



### ACROSS

- 1 Energy of position; "stored" energy.
- 3 An object turns about an internal axis.
- 5 How fast an object travels.
- 6 Any push or pull on an object.
- 7 The property that make an object do work.
- 9 A straight line around which rotation takes place.
- 11 Energy in motion; "moving" energy.
- 14 Outward force during circular motion.
- 17 Speed calculated by the number of rotations.

### DOWN

- 2 Speed calculated tangent to a circle.
- 4 Force of gravity on a mass in Newtons.
- 8 A change in speed over time.
- 10 Gravity created by centrifugal forces.
- 12 Property of matter that keeps an object from moving.
- 13 Inward force during circular motion.
- 15 An object turns about an external axis.
- 16 Speed calculated by distance moved over time.

**PHYSICI – Physics**  
**Chapter 9 (Circular Motion)**

*Use pages 122 – 132 as a reference to answer the following questions in complete sentences.*

1. Distinguish between rotation and revolution.
2. Draw a picture to depict the difference between rotation and revolution.
3. What is the difference between linear speed and rotational speed?
4. What is linear speed called when something moves in a circle?
5. Why is centrifugal force called a “fictitious force”?
6. How does a carousel ride demonstrate circular motion?
7. Look at the picture on page 122. Why do the people on the carnival ride not fall out when it is tipped almost vertically?
8. Why do we have leap years? Explain your answer in relation to circular motion.
9. What are some real-life examples of why you would want to be towards the interior of a circular path instead of the outside of the path?
10. What is simulated gravity?