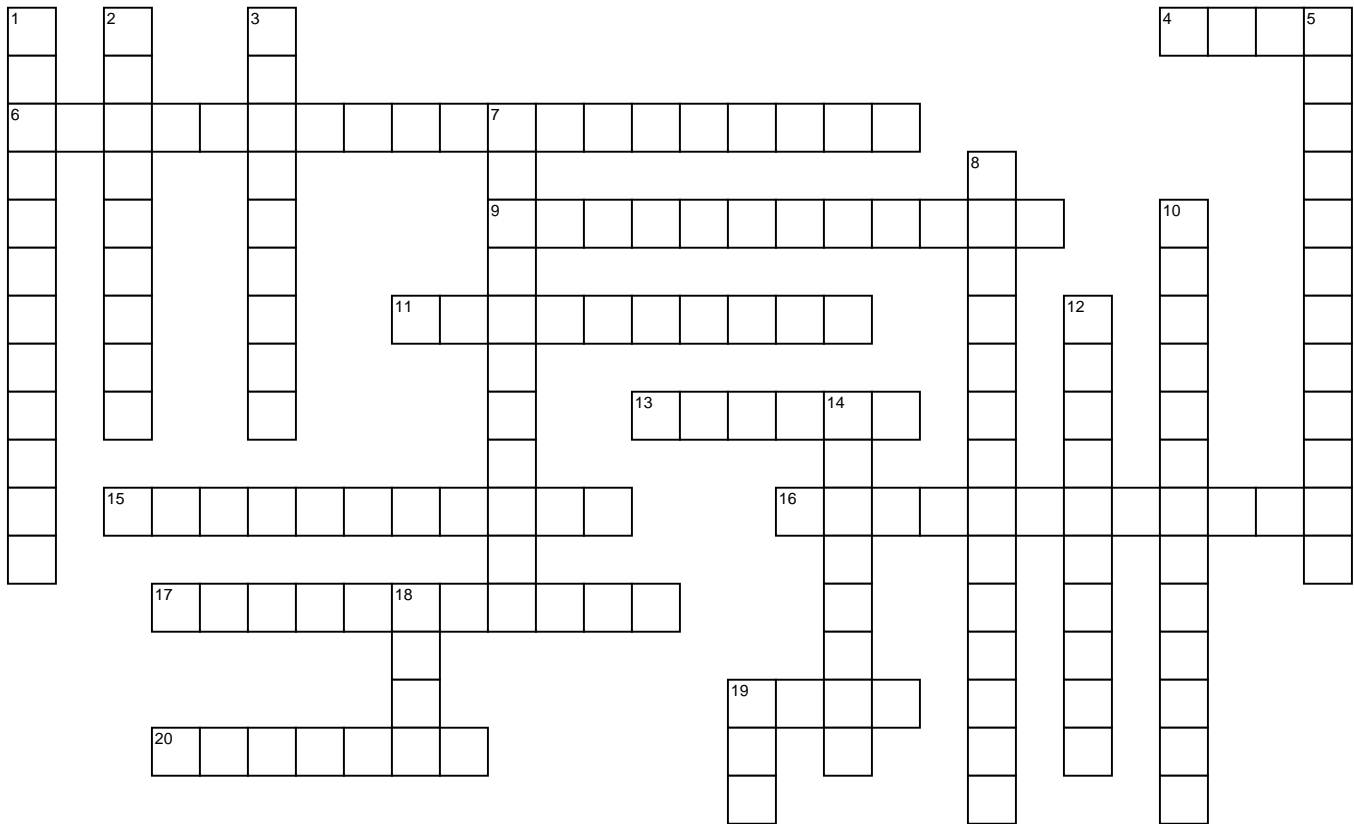


# Wheel and Axle Bearing

## Chapter 11



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### ACROSS

- 4 Most multipurpose greases are labeled with both wheel bearing and chassis grease classifications, such as \_\_\_\_-\_\_\_\_.
- 6 The \_\_\_\_\_ Grease Institute (NLGI) uses the penetration test as a guide to assign the grease a number.
- 9 \_\_\_\_\_ bearings use rolling parts inside the bearing to reduce friction.
- 11 By design, tapered roller bearings can withstand radial loads (up and down) as well as \_\_\_\_\_ (thrust) in one direction.
- 13 \_\_\_\_\_ is oil with a thickening agent to allow it to be installed in places where a liquid lubricant would not stay.
- 15 By design, tapered roller bearings can withstand \_\_\_\_\_ (up and down).
- 16 Most dynamic seals use a synthetic rubber lip seal encased in metal. The lip is often held in contact with the moving part with the aid of a \_\_\_\_\_.
- 17 \_\_\_\_\_ are used between two surfaces that do not move.
- 19 The rollers are held in place by a cage between the inner race (also called the inner ring or \_\_\_\_\_) and the outer race (also called the outer ring or cup).
- 20 The most commonly used automotive wheel bearing is the \_\_\_\_\_ roller bearing.

### DOWN

- 1 \_\_\_\_\_ are used to seal between two surfaces that move.
- 2 The rollers are held in place by a cage between the inner race (also called the inner ring or cone) and the outer race (also called the \_\_\_\_\_ or cup).
- 3 The rollers are held in place by a cage between the inner race (also called the \_\_\_\_\_ or cone) and the outer race (also called the outer ring or cup).
- 5 The purpose and function of \_\_\_\_\_ or roller bearings is to reduce the friction of the rotating parts.
- 7 The inner support that provides the rolling surface for the friction-reducing balls or rollers is called a \_\_\_\_\_.
- 8 The purpose and function of the ball bearing or \_\_\_\_\_ is to reduce the friction of the rotating parts.
- 10 A needle bearing is a type of roller bearing that uses smaller rollers called \_\_\_\_\_.
- 12 Another name for grease retainer.
- 14 In metal fatigue, the metal between the cracks can break out into small chips, slabs, or scales of metal. This process of breaking up is called \_\_\_\_\_.
- 18 The rollers are held in place by a \_\_\_\_\_ between the inner race (also called the inner ring or cone) and the outer race (also called the outer ring or cup).
- 19 The rollers are held in place by a cage between the inner race (also called the inner ring or cone) and the outer race (also called the outer ring or \_\_\_\_\_).