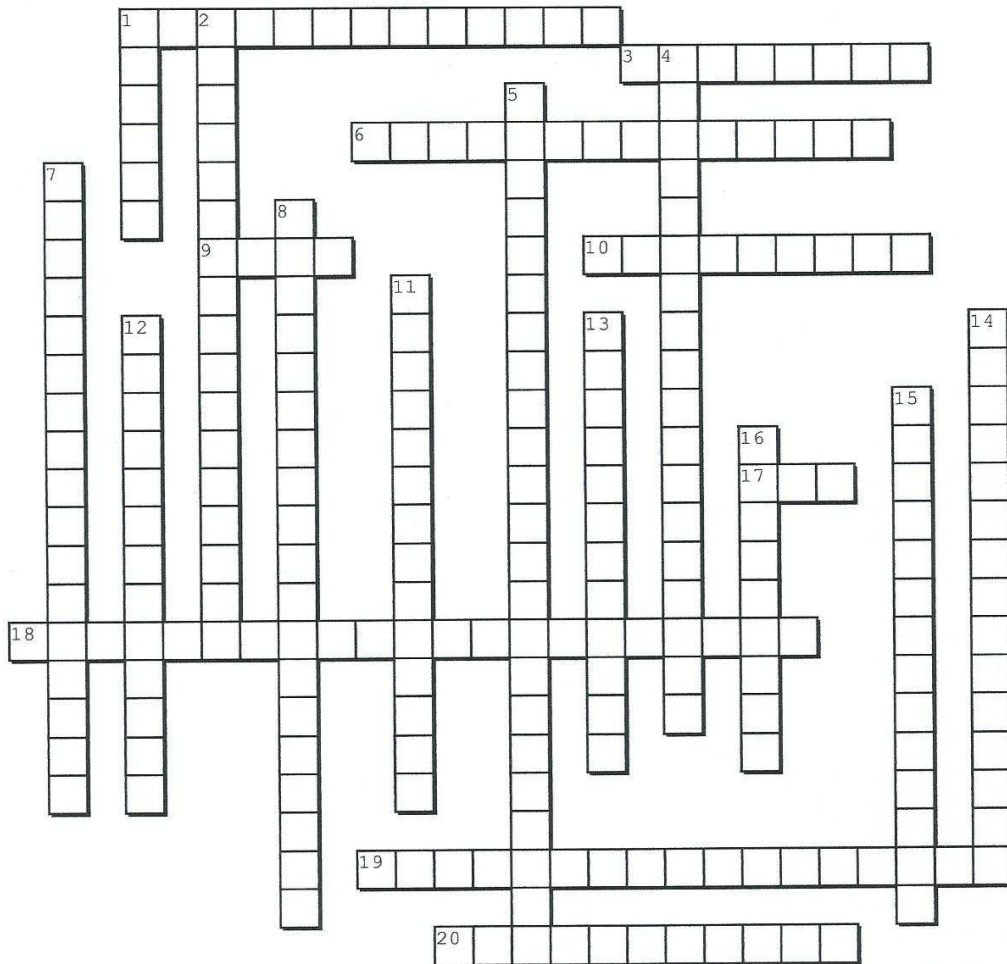


Lesson11_Crossword Puzzle

Name _____

Complete the crossword below



Across

1. Modern automotive engines use precision insert-type
3. Caused by unequal expansion and contraction of two different engine materials
6. Ability of bearing material to creep or flow slightly to match shaft variations
9. Each group of four inline cylinders in the V-8 engine block is called a _____
10. The fiber facing of the gasket is protected around the combustion chamber with a metal armor
17. The silicone rubber material will cure at room temperature (abbrev.)
18. The bearing is manufactured to very close tolerance so that it will fit correctly in each application (3 words)
19. Used in high-productions automotive engines; stronger but more expensive; may have a wide separation line (2 words)
20. Used on many newer all-aluminum cylinder heads; allows the aluminum to expand without losing the sealing ability (Abbrev.)

Down

1. Oldest automotive bearing material
2. used in thread lockers such as Locktite, they cure in the absence of air (2 words)
4. Gasket used in many places including water pumps, valve covers , and oil pans (2 words)
5. The sealing material is extruded, placed onto the surfaces, and the two part clamped together (4 words)
7. May be 0.0005 to 0.0025 in. depending on the engine (2 words)
8. Used on fasteners in the engine that are subjected to high temps; minimize corrosion from moisture (2 words)
11. Crankshafts are balanced by _____ which are cast, forged, or machined as part of the crankshaft
12. When the bearing cap is tightened, the ends of the two bearing shells touch and are forced together (2 words)
13. A lip that helps locate the bearing shell in the housing
14. May be steel, modular iron, or malleable iron. Metal grain structure is uniform and random throughout; able to handle loads from all directions (2 Words)
15. The difference between the bearing shell arc and the bearing housing (2 words)
16. Another name for rod bearing journals