

Animation Worksheet: Power Flow Overdrive Four Speed #3

Name: _____ **Date:** _____

1. The 4T60E transmission is an electronically controlled automatic transmission that achieves its four forward gears and reverse using multiple _____ gear sets.
2. To help the vehicle accelerate strongly from a complete stop, First gear provides a high torque multiplication ratio of _____ to 1.
3. When the transmission is in First gear, the Input clutch and the forward band are applied, while the input _____ is effective to help transfer power forward.
4. During a shift into Second gear, the Input clutch remains applied, and the _____ clutch is added to allow for a smoother transfer of power.
5. In Second gear, because the output of the clutch rotates faster than the input, the input sprag is _____, which causes it to freewheel.
6. Third gear represents a direct drive where the engine speed matches the output speed, resulting in a gear ratio of _____ to 1.
7. To lock the planetary gears together for direct drive in Third gear, both the Second and _____ clutches must be applied.
8. When shifting into Fourth gear to act as an overdrive and save fuel, the transmission operates at a reduced gear ratio of _____ to 1.
9. In Fourth gear, the 4th clutch is applied, and the input _____ gear acts as the reaction member to hold parts steady.
10. To back up the vehicle in Reverse gear, the reverse band is applied, which holds the _____ gear stationary so the output shaft rotates in the opposite direction.