

Animation Worksheet: Power Flow 6T70/6F50

Name: _____ **Date:** _____

1. The 6T70/6F50 is a six-speed automatic transmission that uses a _____ clutch to help control how power flows through different gear ratios.
2. To achieve different gear ratios, clutches are applied selectively to control whether components are driven, _____, or allowed to rotate.
3. The transmission receives its input torque directly from a component called the _____.
4. In first gear, the 1-2-3-4 clutch is applied, which connects the input shaft to the center or input _____ gear.
5. During first gear operation, the planet carrier is prevented from rotating because it is held stationary by the _____ clutch.
6. When the transmission shifts into second gear, the 2-6 clutch applies and locks the _____ sun gear as the reaction component.
7. In third gear, the _____ clutch applies, and torque flows from the sun gear through the planetary gears to the output.
8. When shifting into fourth gear, the _____ clutch applies, which forces the entire gear set to rotate together as a single unit.
9. Fifth gear achieves a _____ ratio because two elements of a planetary gear set are locked together, making the input speed equal to the output speed.
10. In sixth gear, the transmission produces an overdrive ratio of _____, meaning the output shaft rotates faster than the input shaft.