

Animation Worksheet: Power Flow Lepelletier Six Speed

Name: _____ Date: _____

1. The Lepelletier six-speed transmission is an automatic transmission design that combines a simple planetary gearset with a _____ gearset.
2. In first gear, the turbine shaft acts as the input and drives the internal _____ gear of the simple planetary gearset.
3. During first gear operation, the _____ gear of the simple planetary gearset is held stationary.
4. When the _____ clutch applies, it transfers torque from the carrier to the small sun gear in the Ravigneaux gearset.
5. For a second gear shift, brake _____ is applied to hold the large sun gear stationary.
6. When the transmission shifts to third gear, clutches C1 and _____ are both engaged to connect to the large and small sun gears.
7. In fourth gear, the inputs combine to drive the ring gear forward at a ratio of _____ to 1, which is very close to direct drive.
8. When shifting into fifth gear, the ring gear _____ relative to the input, creating a gear ratio of 0.86:1.
9. In sixth gear, clutch C2 is applied, and the long planetary gears walk around the fixed sun gear to deliver an overdrive ratio of _____ to 1.
10. When shifted into reverse with the vehicle stopped, brake _____ applies to keep the planet carrier stationary.