

Animation Worksheet: Sprag Clutch

Name: _____ **Date:** _____

1. A sprag clutch is used in automatic transmissions to allow rotation in one direction only and _____ in the opposite direction.
2. The sprag clutch enables smooth _____ by automatically engaging or disengaging parts of the gear train.
3. The sprag clutch operates without requiring hydraulic control or _____ clutches.
4. To stabilize gear shifts and contribute to smoother acceleration, the sprag clutch prevents _____.
5. The sprag clutch plays a key role in gear sets like _____ gear systems.
6. A sprag clutch consists of an outer race, an _____, and sprags.
7. Sprags are specially shaped _____ pieces located between the races that engage under certain conditions.
8. In the video example, the inner race can rotate freely in a _____ direction.
9. The sprag clutch locks to transfer torque in one direction and _____ in the other direction.
10. The sprag clutch plays a silent but essential role in efficient, smooth, and _____ transmission function.