

Animation Worksheet: PGS 7, Direct Drive

Name: _____ **Date:** _____

1. Direct drive occurs when the transmission locks the input and output to rotate at the same speed, bypassing any gear _____ or overdrive.
2. In the specific direct drive setup shown in the video, both the ring gear and the _____ gear are driven as inputs.
3. In a hybrid system, the multiple inputs can be engine-driven or powered by _____ motors.
4. The planetary _____ gears are fixed to the carrier, which prevents relative motion between them.
5. The carrier holds the planet gears and delivers a _____ ratio to the output shaft.
6. With a 1:1 gear ratio, if the engine rotates at 1,000 RPM, the transmission output will rotate at _____ RPM.
7. The rotational speed of the engine and transmission output are identical before reaching the final drive ratio in the _____.
8. This specific planetary gear set configuration is commonly found in hybrid _____.
9. Locking the pinions creates a direct drive mode that combines _____ from both power sources.
10. This system is most prominent and useful during scenarios such as highway _____.