

Animation Worksheet: PGS 6, OD

Name: _____ **Date:** _____

1. In this example, the carrier which holds the planet gears is driven by the _____ torque.
2. The planet gears rotate on their individual axes while also _____ around the sun gear.
3. The sun gear is fixed and does not rotate, acting as a _____ member.
4. This forces the planet gears to walk around the sun gear's outer teeth, transmitting torque through their _____ motion.
5. The planet gears mesh with the _____ gear, driving it.
6. Because the planet gears are orbiting the stationary sun gear, the ring gear rotates _____ than the carrier, resulting in overdrive.
7. This configuration causes the ring gear to spin in the same direction as the carrier but at a higher speed, reducing _____ while increasing rotational speed at the output.
8. The result is an overdrive ratio where the output speed exceeds the input speed, and the gear ratio is _____ than 1 to 1.
9. The gear ratio is determined by the number of teeth on the _____ gear and the ring gear.
10. The overdrive ratio in this planetary gear set is _____ to 1, or 3 to 4.