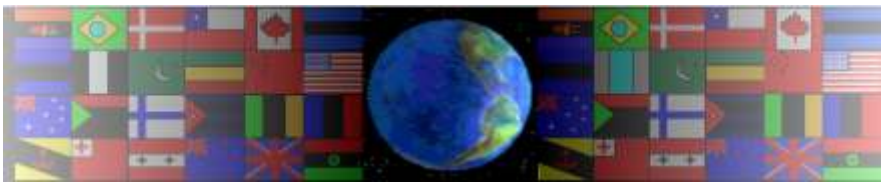
GEARS

On behalf of The World Association of Technology Teachers

W.A.T.T.

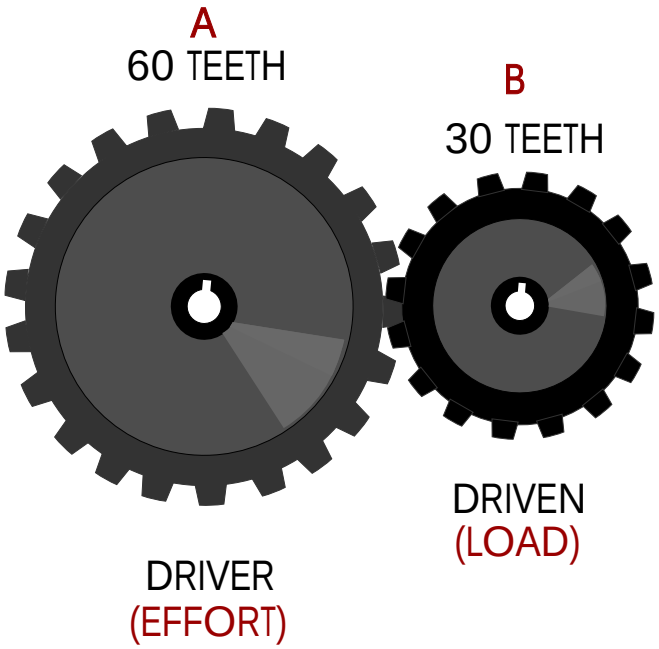


World Association of Technology Teachers

This ‘Exercise’ can be printed and used by teachers and students. It is recommended that you view (www.technologystudent.com) before attempting the worksheet .

REVOLUTIONS PER MINUTE (RPM)

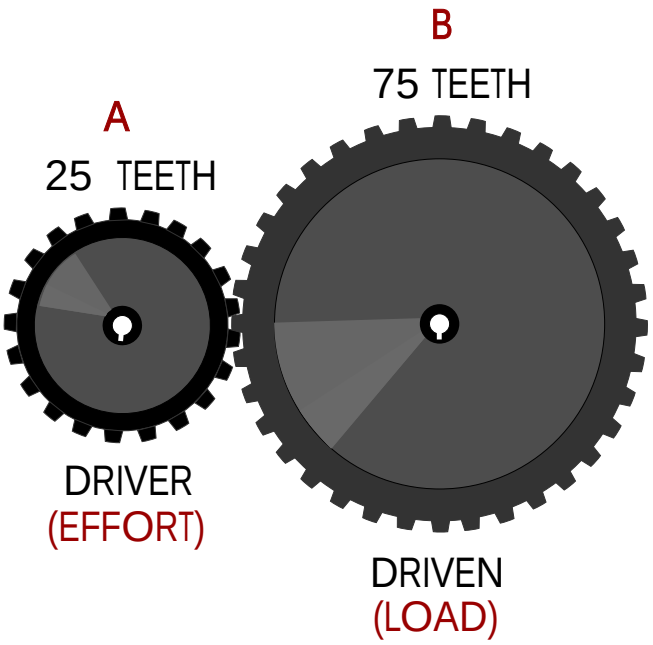
In the example below the DRIVER gear is large than the DRIVEN gear. The general rule is - large to small gear means 'multiply' the velocity ratio by the rpm of the first gear. Divide 60 teeth by 30 teeth to find the velocity ratio. Multiply this number (2) by the rpm (120). This gives an answer of 240rpm.



GEAR A	GEAR B
60 teeth	30 teeth
120 rpm	

— =

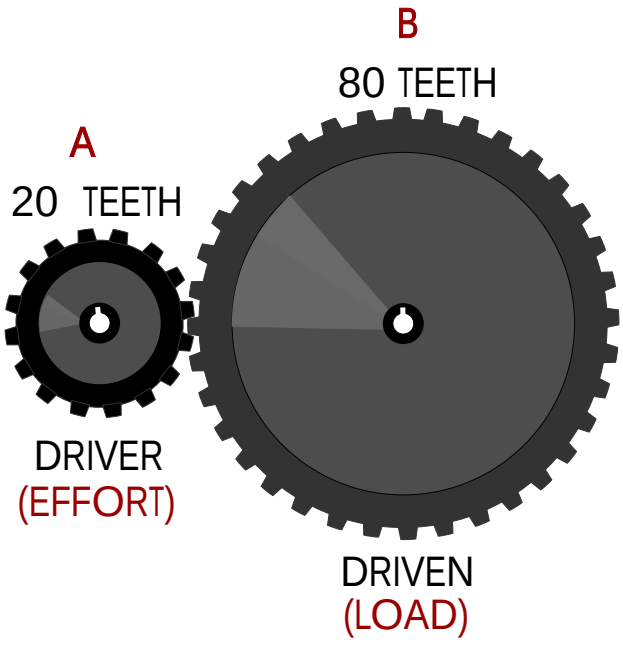
= = revs/min



GEAR A	GEAR B
25 teeth	75 teeth
60 rpm	

— =

= — = revs/min



GEAR A	GEAR B
20 teeth	80 teeth
100 rpm	

— =

= — = revs/min