




















Mechanisms Chooser Chart

For this mechanical function:	You can use:
Changing the type of movement	
 from linear to rotating	wheel and axle, rack and pinion, screw thread, rope and pulley, chain and sprocket
 from rotating to linear	wheel and axle, rack and pinion, screw thread, rope and pulley, chain and sprocket
 from rotating to reciprocating	crank, link and slider (4-bar linkage), cam and slide follower
 from rotating to oscillating	crank, link and lever (4-bar linkage), cam and lever follower, peg and slot
 from rotating to intermittent rotating	Geneva wheel (a cam plus peg and slot)
 from reciprocating to rotating	crank, link and slider (4-bar linkage)
 from reciprocating to oscillating	wheel and axle, rack and pinion, crank and slider (4-bar linkage)
 from oscillating to rotating	crank link and lever (4-bar linkage), peg and slot
Changing the direction of movement	
 from clockwise to anticlockwise	gears, belt and pulley
 from left to right	levers, linked levers, rope and pulley
 from horizontal to vertical	levers, linked levers, rope and pulley

Mechanisms Chooser Chart (cont'd)

For this mechanical function:	You can use:
<i>Changing the size of rotation</i>	
	bevel gears, flexible couplings, worm and wheel, belt and pulley
<i>Increasing output force and decreasing speed</i>	
 <p>with parts rotating or oscillating:</p>  <p>with parts reciprocating or moving in a straight line:</p>	gears, bevel gears, worm and wheel and axle, belt and pulley, chain and sprocket rope and pulley, levers, linked levers
<i>Increasing output speed and decreasing force</i>	
 <p>with parts rotating or oscillating:</p>  <p>with parts reciprocating or moving in a straight line:</p>	gears, bevel gears, wheel and axle, belt and pulley, chain and sprocket levers, linked levers
<i>Applying or maintaining a force</i>	
	screw thread, worm and wheel, cam, rope and pulley, toggle (4-bar linkage), spring, brake system
<i>Transmitting force and movement</i>	
 <p>linear or reciprocating movement</p>	linked levers, rods
 <p>rotating or oscillating movement</p>	belt and pulley, chain and sprocket, linked levers, shafts and couplings