

Max's Magnificent Mechanisms: How Things Move!

Get Moving with Max: Discover the Engineering Magic Inside Your Favorite Toys!

- A lever is a stiff bar that rests on a support called a pivot. When you push one end of the lever down, the other end moves up!
- Linkages connect two or more parts together. When one part moves, the linkage makes the other parts move at the same time in a specific direction.
- A cam is a shaped wheel that rotates. As it spins, it pushes a 'follower' up and down, which can make a toy figure dance or jump.
- Mechanical systems always have an input (the force you apply) and an output (the movement that happens as a result).
- When designing a mechanism, remember that friction can slow things down. Using smooth materials helps your moving parts glide easily.

Did you know? Did you know? The very first mechanisms were used thousands of years ago to help move heavy stones for building! Today, your favorite pop-up books and moving toys use these same clever principles of physics to turn simple pushing or pulling into exciting action.

Key vocabulary: Mechanism · Lever · Pivot · Linkage · Cam · Follower · Input · Output