MECHANICAL FUNCTIONS

Technical Objects: Objects that are thought of and produced by humans to meet one or more <u>needs</u> (*examples: can opener, sharpener, drill, screw driver*).

These objects are held together by different <u>links</u>, have different <u>systems</u> to produce different types of <u>motions</u>, and are made of **different** <u>materials</u>.

1. Links:

- Links are responsible for holding different parts of the technical object together.
- These links can be directly or indirectly attached, rigid or flexible, removable or non-removable, and completely or partially attached.
- The different types of links are fixed, rotating, sliding, sliding rotating, spherical and helical.

For example, your can opener cannot function if we did not have screw and bolts (**indirect** links) linking the different parts together.

2. Systems:

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1. Gear systems (aka Motion Transmission Systems)

Many types of technical objects have gear systems (aka motion transmission systems) that transmit the **<u>same</u>** movement from part of the object to another, so that work can be done with it.

2. Motion Transformation Systems:

Other types of technical objects have systems that do work by **<u>changing</u>** the type of motion from one part of the system to another part.