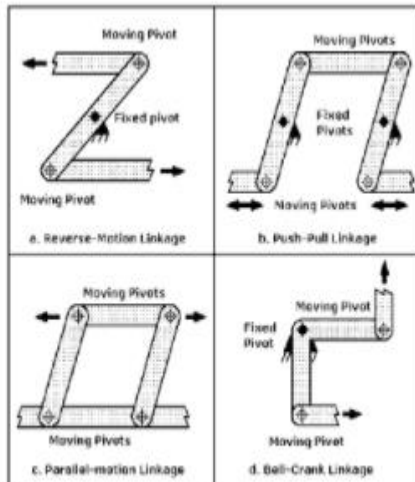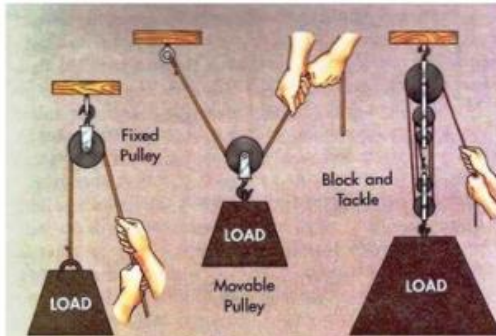## Technical knowledge

Board games are table top games that typically use pieces being moved or placed on a pre-marked board and often include elements of card, role-play and miniature games as well. Most feature a competition between two or more players.

Three types of pulleys

1. fixed pulley – attached to something that doesn't move
2. movable pulley – end of rope fixed and wheel is free to move
3. Block and tackle – system of pulleys consisting of fixed and movable pulleys

Simple Planar Linkages by Function

Reverse-Motion Linkage, Fig.a, can make objects or force move in opposite directions; this can be done by using the input link as a lever.

Push-Pull linkage, Fig.b, can make the objects or force move in the same direction; the output link moves in the same direction as the input link.

Parallel-Motion linkage, Fig.c, can make objects or forces move in the same direction, but at a set distance apart.

Bell-Crank linkage, Fig. d, can change the direction of objects or force by 90°.

a. Reverse-Motion Linkage
b. Push-Pull Linkage
c. Parallel-motion Linkage
d. Bell-Crank Linkage

Functions of four basic planar linkage mechanisms

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Key Vocabulary

enterprise	A project/idea that grows and makes money.
entrepreneur	A person who sets up a business or businesses, taking on financial risks in the hope of profit.
Linkages	A mechanical linkage is an assembly of bodies connected to manage forces and movement.
rotational motion	The movement of an object around a circular path
reciprocal motion	A repetitive up-and-down or back-and-forth linear motion
Pulleys	wheel on an axle or shaft that is designed to support movement and change of direction of a taut cable or belt, or transfer of power between the shaft and cable or belt.

Enterprise in the Wider World

Dragons Den- Pitching your idea
Budding entrepreneurs get three minutes to pitch their business ideas to five multi-millionaires who are willing to invest their own cash, time and expertise to kick-start the business. After the pitch the Dragons have the opportunity to ask questions about the venture.