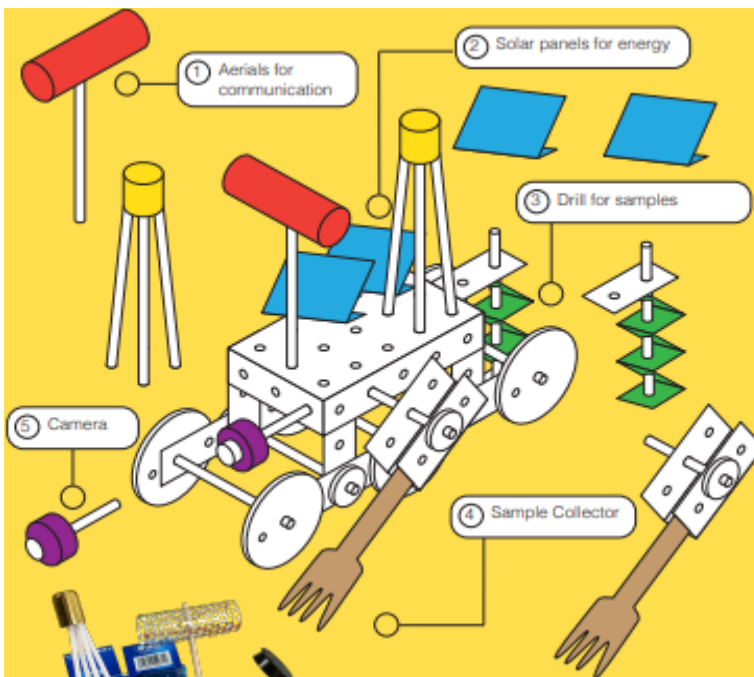


Year 5—Design and Technology

Design and create your own Mars Rover

Key Vocabulary:

Design Decisions, Functionality, Authentic, User, Purpose, Design Specification, Design Brief, Innovative, Research, Evaluate, Design Criteria, Annotate, Mock-Up, Prototype.



STRUCTURES

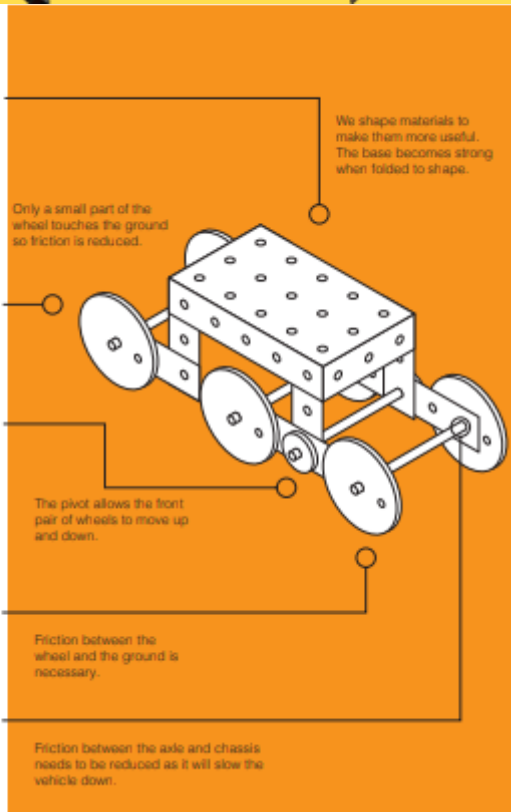
TechCard mimics the way many real world structures are made strong. Before being folded, the flat TechCard base is not strong but becomes structurally useful when folded to shape.

MECHANISMS

The Mars Rover uses wheels and axles so that it can move easily by reducing friction with the ground. The articulated rover also uses a 'pivot' which allows one set of wheels to move up and down so the rover can go over bumpy ground.

FORCES

Friction is a force that effects all mechanisms. It occurs when two surfaces rub together. We try to reduce friction in machines so they run more efficiently. But friction isn't always bad. Friction is needed between the wheels of a vehicle and the ground so the wheels can rotate and move the vehicle.



MECHANICAL PARTS

