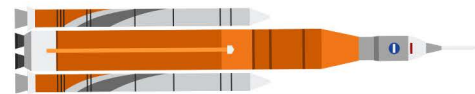


How do reactions power rockets?

Guided reading



Rockets are propelled up into the sky by a chemical reaction known as combustion. This is a process where fuel reacts with oxygen, releasing heat and producing hot gases.

The hot gases are forced through a nozzle, then they expand rapidly and accelerate. This expansion generates thrust. The faster and hotter the gases, the greater the thrust. Thrust helps the rocket lift off.

Gravity, a pulling force, is trying to keep the rocket on the ground. There has to be enough thrust from the rocket's engines to overcome gravity.

Rockets are powered by burning fuel, which makes hot gases shoot out of the base of the rocket, and this pushes the rocket upwards and away from the Earth.

Questions



1. Which chemical reaction propels rockets into the sky?

2. What do rockets need to help it to lift off?

3. Which force pulls things back towards Earth?

