

Anatomy of Earth

Crust - the surface

Outer shell of solid rocks and minerals that forms continents and the ocean floor

Mantle - 40 km below surface

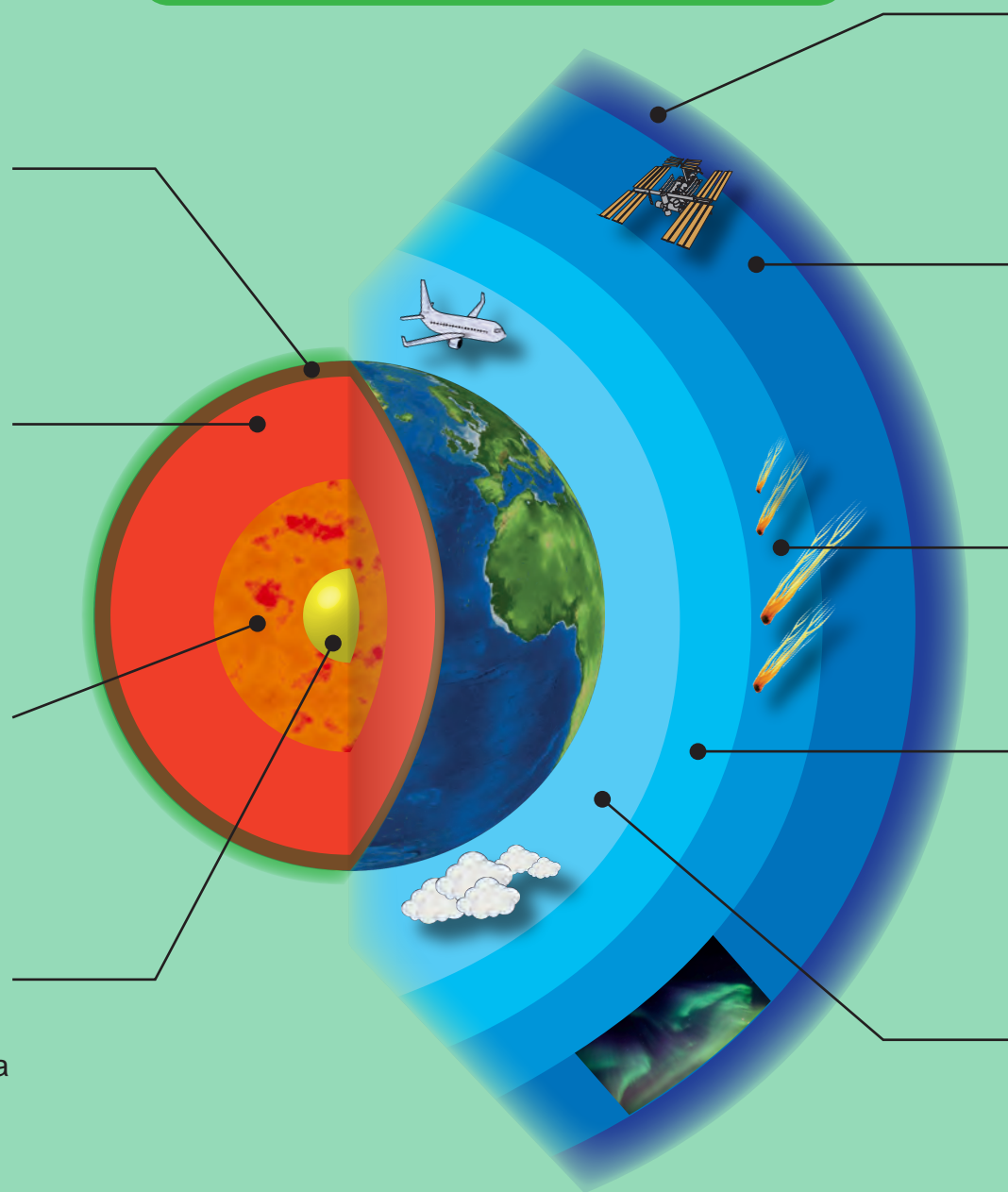
Made of silicate rocks but parts of the layer move as a fluid, driving plate tectonics, earthquakes, volcanic eruptions

Outer Core - 2900 km below surface

Liquid layer of iron-nickel alloy that generates Earth's magnetic field

Inner Core - 5100 km below surface

Solid ball mostly made of iron with a temperature of about 5200°Celsius



Exosphere - up to 10,000 km

Upper limit where very few gas particles exist which only just feel the pull of Earth's gravity

Thermosphere - up to 1,000 km

Where the aurora occur and home to satellites including the International Space Station, some people consider space to start at 100 km

Mesosphere - up to 85 km

Where meteors burn up after entering the atmosphere

Stratosphere - up to 50 km

Contains the ozone layer which protects us from the sun's UV radiation by absorbing and converting it to heat, the air gets warmer higher up

Troposphere - up to 20 km

The air we breathe: most weather and clouds exist here, the air gets colder higher up, and airplanes fly here; the layer thickness varies with the seasons and is thinner at the poles ~7 km