Gravity

Gravitational force is an attraction between masses. The strength of the force is proportional to the masses and weakens rapidly with increasing distance between them.
ⓘ *Gravity*

The sun's gravitational pull holds the Earth and other planets in their orbits, just as the planets' gravitational pull keeps their moons in orbit around them.

Every object exerts gravitational force on every other object. The force depends on how much mass the objects have and on how far apart they are. The force is hard to detect unless at least one of the objects has a lot of mass.
ⓘ *Gravity*
🌐 Stars

The motion of an object is always judged with respect to some other object or point and so the idea of absolute motion or rest is misleading.
ⓘ *Day and night*
ⓘ *Phases of the moon*
🌐 Solar System
🌐 Laws of Motion

If a force acts towards a single centre, the object's path may curve into an orbit around the centre.
🌐 Laws of Motion

Everything on or anywhere near the Earth is pulled toward the Earth's centre by gravitational force.

An unbalanced force acting on an object changes its speed or direction of motion, or both.
ⓘ *Making a change*
🌐 Laws of Motion

The Earth is one of several planets that orbit the sun, and the moon orbits around the Earth.
ⓘ *Day and night*
🌐 Phases of the Moon
🌐 Gravity

People can not determine how the solar system is put together just by looking at it.
🌐 Solar System

The rotation of the Earth on its axis every 24 hours produces the night-and-day cycle. This turning of the planet makes it seem as though the sun, moon and stars are orbiting around the Earth once a day.
ⓘ *Day and night*
🌐 Stars 🌐 Solar System

Like all planets and stars, the Earth is approximately spherical in shape.

Changes in speed or direction of motion are caused by forces.
ⓘ *Making a change*
🌐 Gravity

The Earth's gravity pulls any object on or near the Earth toward it without touching it.

The patterns of stars in the sky stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.
🌐 Stars 🌐 Solar System

The sun can only be seen in the daytime but the moon can be seen sometimes at night, sometimes during the day. The sun, moon and stars all appear to move slowly across the sky.
🌐 Stars 🌐 Solar System

Shapes such as circles, squares and triangles can be used to describe many things that can be seen.

Things near the Earth fall to the ground unless something holds them up.

The way to change how something is moving is to give it a push or a pull.
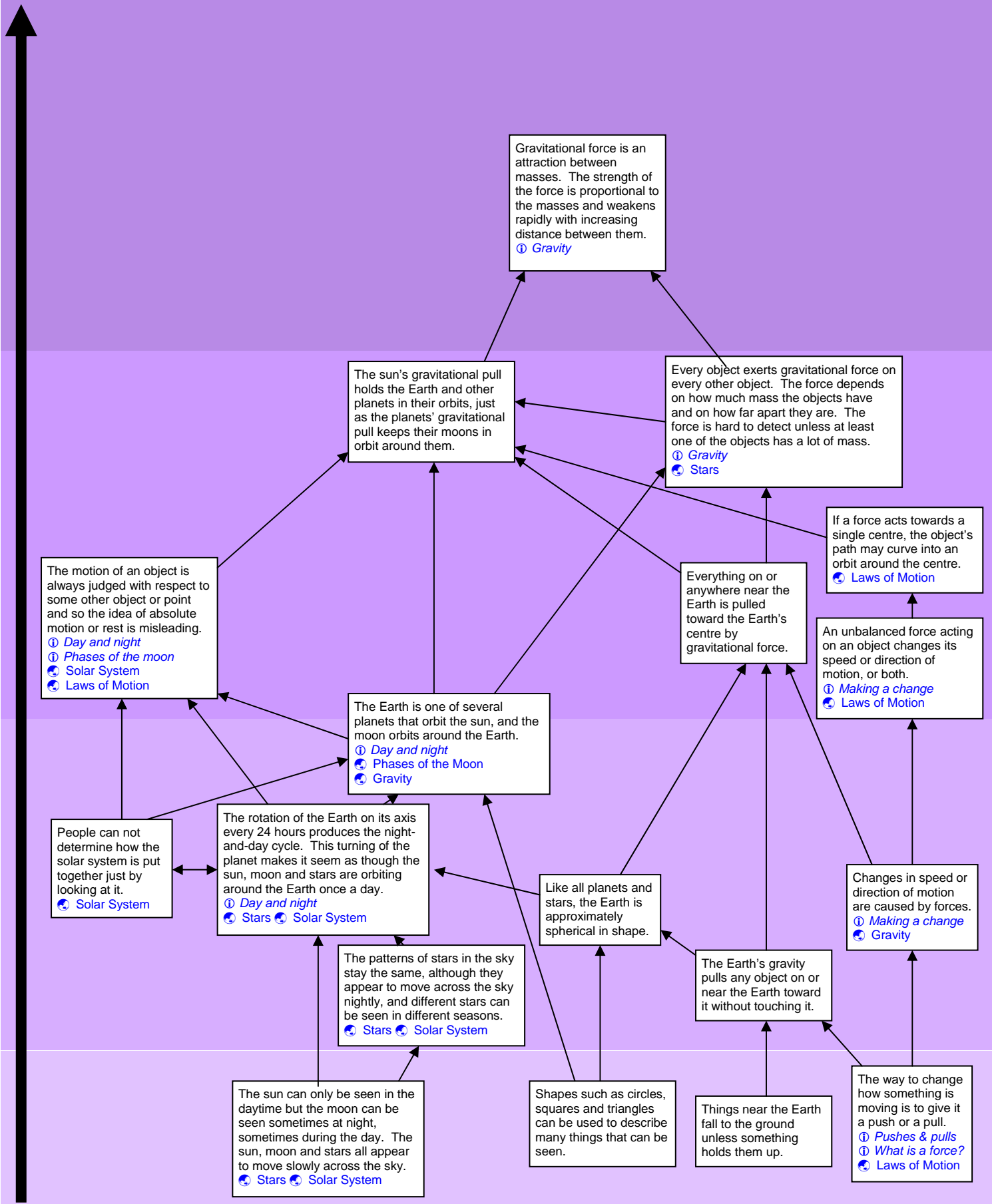ⓘ *Pushes & pulls*
ⓘ *What is a force?*
🌐 Laws of Motion

relative motion

observations of the sky

the Earth's gravity

forces and motion

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