Physics 2 Space - Part 2

1.	**non-inertial frame of reference**	an accelerated frame of reference in which inertial forces are present
2.	**orbit**	the path followed by an object travelling in space
3.	**orbital decay**	when low altitude orbiting objects such as satellites and discarded "space junk" re-enter the Earth's atmosphere and ultimately burn up
4.	**projectile motion**	the motion of an object under the influence of a vertical force only, such as an object thrown in the air
5.	**projectiles**	any objects moving under the influence of gravity only
6.	**radio waves**	long-wavelength members of the electromagnetic spectrum
7.	**re-entry**	the return of a spacecraft into the Earth's atmosphere and subsequent descent to Earth
8.	**relativity**	a theory that describes matter, space and time and how they relate to each other; that the laws of physics are the same for all inertial observers
9.	**simultaneity**	where two or more events that are simultaneous for one observer are not necessarily simultaneous for observers in different inertial frames of reference
10.	**slingshot effect**	a method by which a spacecraft can be accelerated by use of the planets, relying on conservation of angular momentum
11.	**special relativity**	the theory of relativity restricted to inertial frames of reference
12.	**thought experiments**	experiments "conducted" entirely in a person's brain, as used by Einstein in his special theory of relativity
13.	**time dilation**	the phenomenon where time in a moving frame appears to be slower relative to a stationary observer
14.	**time travel**	the use of time dilation to allow trips to distant planets
15.	**trajectory**	the path of a projectile
16.	**twin paradox**	a paradox of special relativity involving twins
17.	**universal gravitation**	the law that two or more masses attract each other
18.	**weight**	the force on an object due to it being in a gravitational field