Gravity

Go to this site and watch: http://www.youtube.com/watch?v=qnzquEOMLGU

In the Universe, the most important force is gravity. Between any two objects the gravitational attraction is proportional to the product of the masses divided by the square of the distance between them. Gravity is the force responsible for keeping the Earth and other planets in our solar system in orbit around the Sun. Gravity also governs the motions of the Sun and nearly all the stars you can see in the sky, which are orbiting about the centre of the Milky Way Galaxy. Apart from observing that objects large and small are gravitationally attracted to each other, astronomers also observe that the Universe is expanding: an after-effect of the birth of the Universe in the Big Bang.

Gravity helped form our solar system, the planets, and the stars. The gravitational pull of the Sun and Moon creates the tides on Earth. Far beyond our solar system, the irresistible force of gravity is collapsing stellar cores into amazing and bizarre objects in our universe, neutron stars and black holes.

Pushing the Moon Away

Our Moon is moving farther away from Earth!
The energy transferred from gravitational tides is causing the Moon to move away at almost 4 cm a year, and slowing the Earth's rotation!

Copy this: C:\Users\ksimpson\Documents\_2014 Term 4\year 9\UNIVERSE\gravity\Gravity_and_Space.ppt

Interactives:

http://sciencenetlinks.com/interactives/gravity.html

http://highered.mheducation.com/olcweb/cgi/pluginpop.cgi?it=swf::800::600::/sites/dl/free/0072482621/78778/Gravity

https://sites.googlegroups.com/a/pvlearners.net/jaburke/astronomy/chapter-5---newton-einstein-and-gravity/chapter-5-animations/Cannon.swf?attachauth=ANoY7cp31KwH1LHIQ8wpxTEFUitCXKkFEswfGL3ftpxZsH71GMAoZqwMXw_k-Dp07azSGKfd75IjvCcFzlyqExTYO7Ydn2dtVtgEig78NwVzjQxCN5FxW0Rwp8Lw1K19P4T0GckYrFwPtjzuEmjOqnM2nhEzhyOWFkzXCaZydaoK1jSTRLP8NvulDm6R1_eij6QPyqVF5efQmXfw9IXjiptAcAooPQmjg-Gr9zyaz3f6l5Yk6_sHRDQVL8eW3x-FXTnWbowlyJKPyv_H-rnjzSAY_mlp4o3t_6ziXLLDbZQboZ4SSA7WaOQ%3D&attredirects=0

https://solarsystem.nasa.gov/yss/display.cfm?ThemeID=28

http://imagine.gsfc.nasa.gov/docs/ask_astro/answers/970108b.html