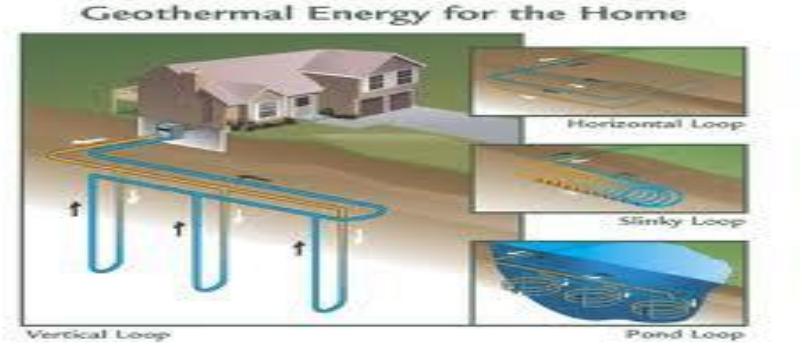
Types of energy

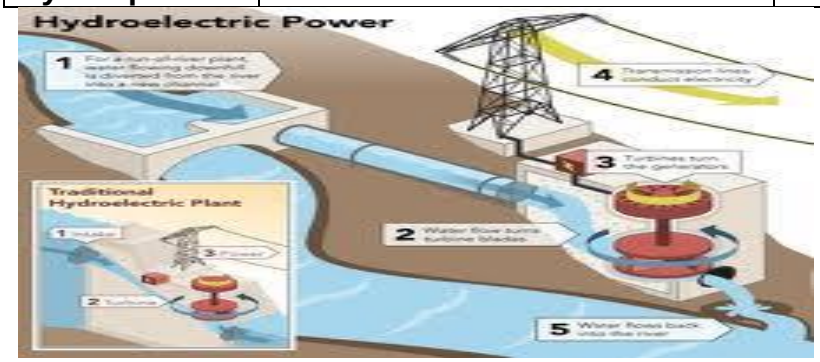
	Explanation	Positive and negative
Fossil fuels **Lithosphere**	· result from the transformation of organic matter to inorganic matter · includes coal, natural gas and oil which are compressed over millions of years and formed fossil fuels	-when fossil fuels are burned they produce CO_2 and CH_4 which are main contributors to global warming

	Explanation	Positive and negative
Uranium **Lithosphere**	·natural occurring element in the earth's crust. -splitting the nucleus allows a huge output of energy	-waste material and equipment remains radioactive for hundreds of years. It is buried underground. -risk of accidents is a constant concern (radioactivity) -one handful provides as much energy as 70 tonnes of coal

	Explanation	Positive and negative
Geo thermal **Lithosphere**	· from the internal heat of the Earth · a fluid is circulated deep underground, heated, and then returns to surface	-used mostly in volcanic regions of world -very expensive to install for individual homes - no green gases emitted



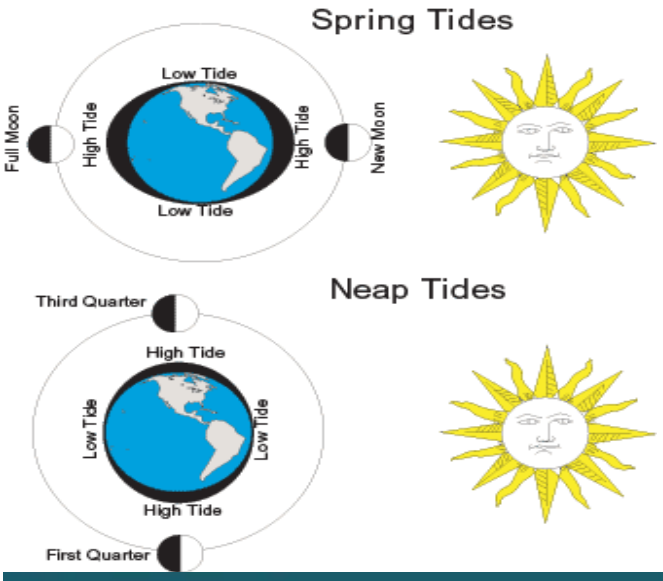
	Explanation	Positive and negative
Hydraulic **Hydrosphere**	-derived from moving water	-renewable -no greenhouse gases emitted -severe damage to ecosystems

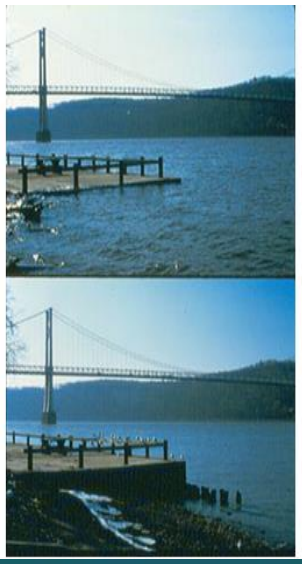


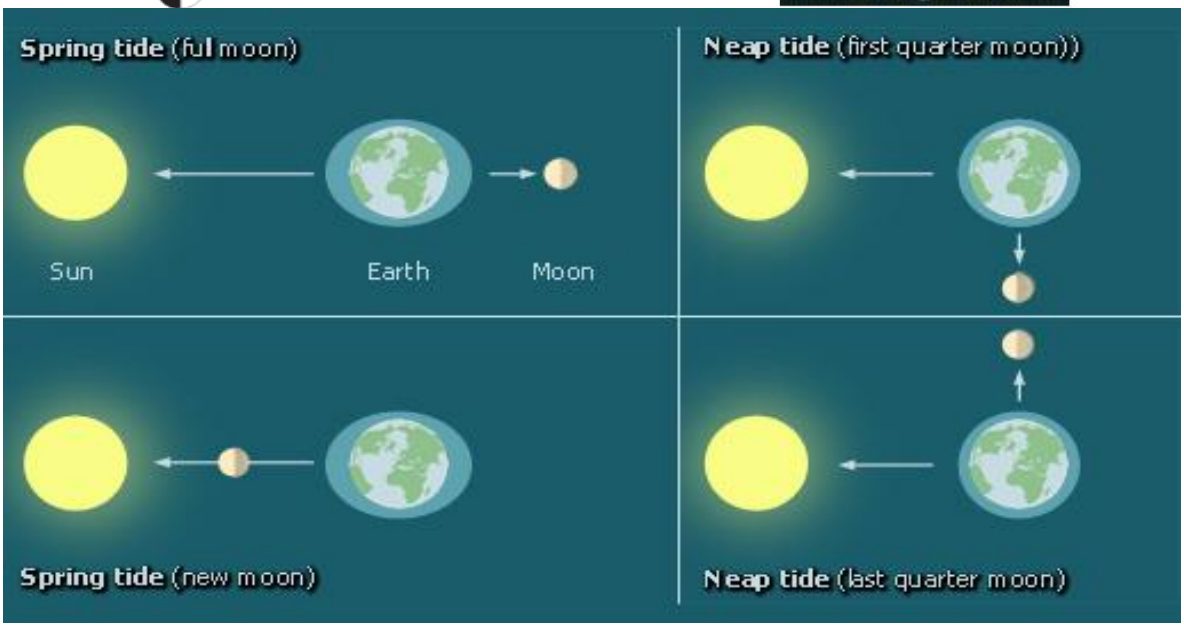
	Explanation	Positive and negative
Tidal energy **Hydrosphere**	-energy obtained from the flow of ocean tides -works like a hydro electric plant	-no emissions -renewable -not always available and energy can't be stored

Tides

- High and low tides are the change in sea level due to the attraction to the moon, sun and the rotation of the earth.
- There are 2 high tides and 2 low tides each day.
- When closest to the moon, water is pulled toward it creating a high tide.
- When furthest from the moon, Earth is pulled more toward the moon than water which also creates a high tide.
- When the earth, moon and sun are aligned Spring tides are created which are the highest tides.
- When they are not aligned, high tides are called Neap Tides.







	Explanation	Positive and negative
Wind and Solar energy **Atmosphere**	-energy that can be drawn from the wind -as blades turn, they activate an electric generator -energy that comes from the sun in the form of radiation	-no emissions -renewable -can ruin landscape -wind not always available and can't be stored, but sun's energy can be stored -often used in combination with another type of energy power