



# Geothermal Energy

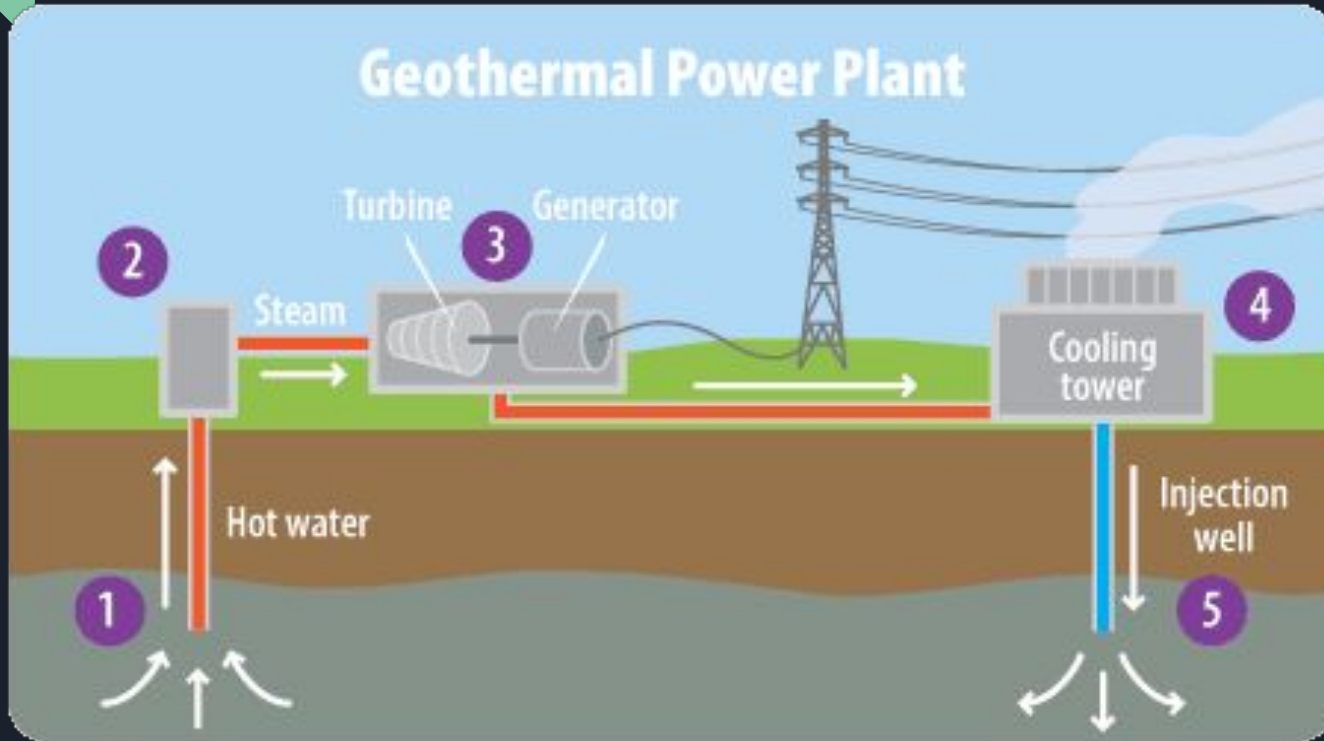
By Isabella Uncangco  
Dolores San Gil



# Key Terms

1. Geothermal energy: water heated by magma to a boiling point
2. Magma: a molten mixture of rock-forming substances, gases and water that makes up part of earth's mantle.
3. Power plant: is the facility for the generation of electric power

# Diagram





# Pros and cons

90% of homes are heated by water warmed underground by geothermal energy.

Small footprint (don't need much space to do)

Not a significant source of pollution.

Fewer moving parts mean minimal maintenance issue.

There are only a few places where magma comes close to earth's surface.

It requires an incredible usage of water.

In certain places, it is very expensive because deep wells must be drilled to tap this energy.

It damages underground loops (tree roots, rodents, etc.) can be difficult and costly to repair.



# Best location to build power plant

## Iceland

Iceland is a good location to build a power plant for a volcanic region. This means that it has a high concentration of volcanoes in the area. Why is this needed for geothermal energy? It is needed because in process of geothermal energy, you would need hot water from the magma.



# Questions

1. What is geothermal energy?
2. Briefly describe the 5 step process to produce electrical energy?
3. What is one advantage when using geothermal energy?
4. What is one disadvantage when using geothermal energy?
5. Why can this energy only be built in certain places?



# Works Cited

- <https://www.comfort-pro.com/2015/06/geothermal-energy-pros-and-cons/>
- <https://www.energysage.com/about-clean-energy/geothermal/pros-cons-geothermal-energy/>
- <https://whatis.techtarget.com/definition/footprint>



# Materials needed for model

- straws
- 2 cans
- Popsicle sticks
- Yarn
- 2 boxes
- 1 big box