

OREEP
PRESENTS



Ree & GEE

#04 GEO
THERMAL
POWER

OK

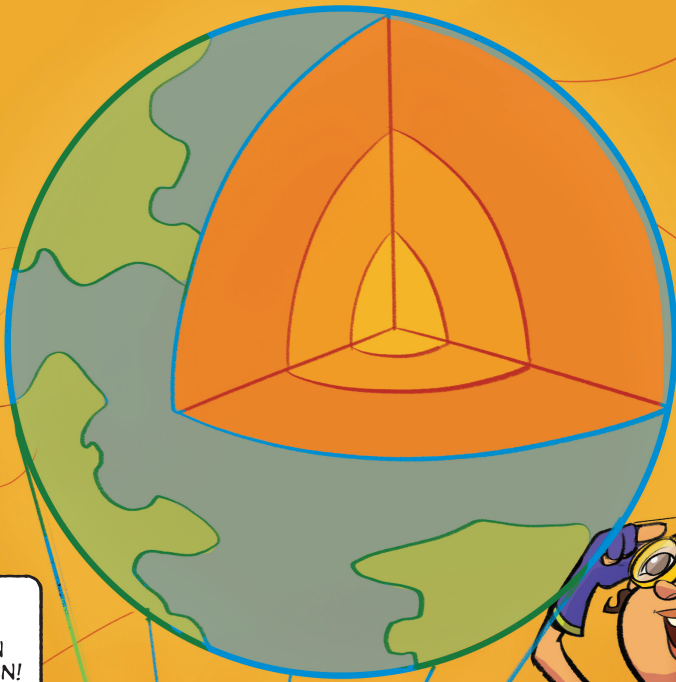
THE ADVENTURES OF REE NEWABLE & GEE

(GREEN ENERGY EXPLORER)

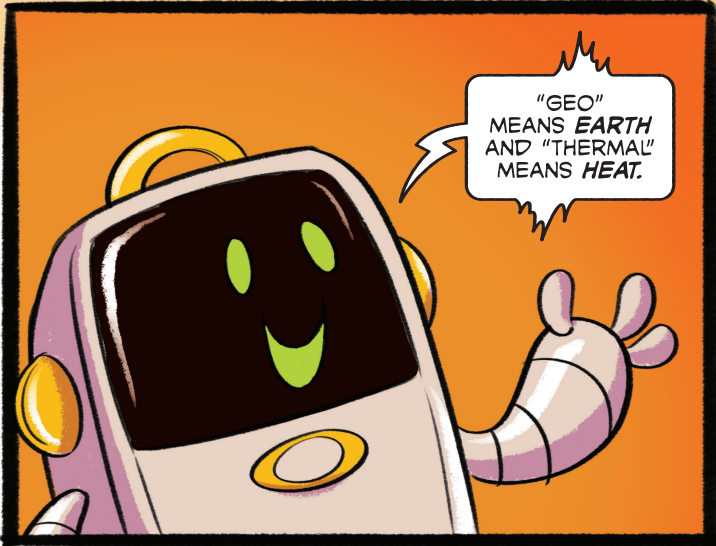
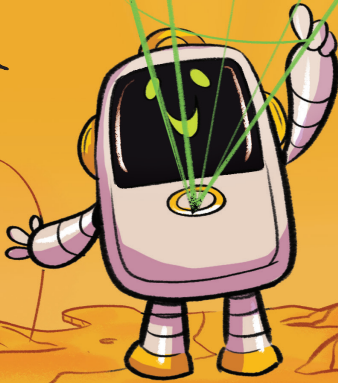
REE NEWABLE,
WELCOME TO
THE CENTER
OF THE EARTH!

GEE, IT
SURE FEELS
HOT DOWN
HERE!

Note: Ree and GEE aren't *actually* in the center of the Earth!
GEE is using *virtual reality projection* to mimic the experience.



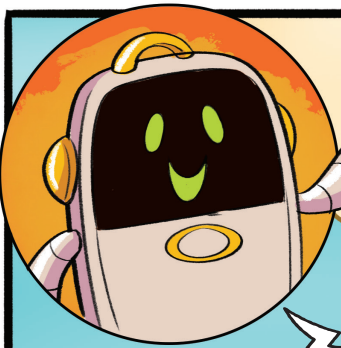
THE INNER CORE *IS* EXTREMELY HOT, REE! IT'S EVEN HOTTER THAN THE SURFACE OF THE SUN! THIS INNER CORE HEATS UP THE OTHER LAYERS OF THE EARTH. THE OUTER LAYER, CALLED THE CRUST, IS THE COOLEST LAYER. THE HEAT PRODUCED IN THE INNER CORE IS THE SOURCE OF GEOTHERMAL ENERGY!



"GEO" MEANS *EARTH* AND "THERMAL" MEANS *HEAT*.



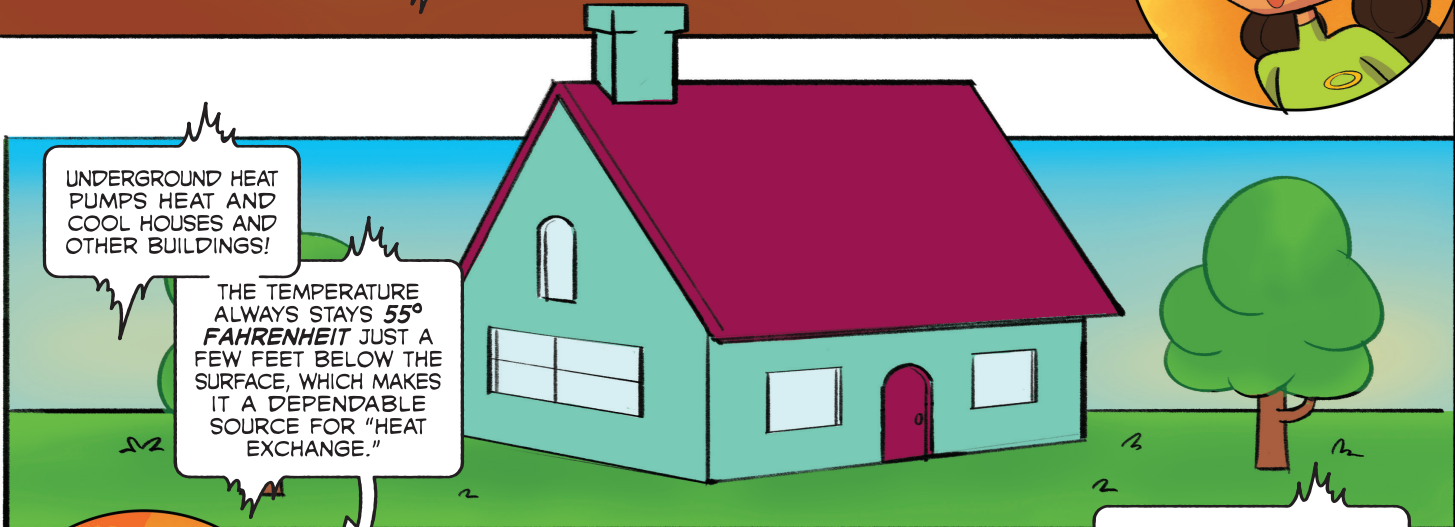
SO "GEOTHERMAL ENERGY" MEANS ENERGY FROM THE HEAT OF THE EARTH!



WATER HEATED BY GEOTHERMAL ENERGY SOMETIMES GUSHES OUT OF OPENINGS IN THE CRUST AROUND THE WORLD CALLED **GEYSERS**. ELECTRICITY CAN BE GENERATED BY DRILLING PIPES **MILES** INTO THE EARTH AND USING **STEAM** FROM THE SUPER-HOT WATER.

IT'S LIKE CREATING OUR OWN GEYSERS TO PRODUCE ENERGY!

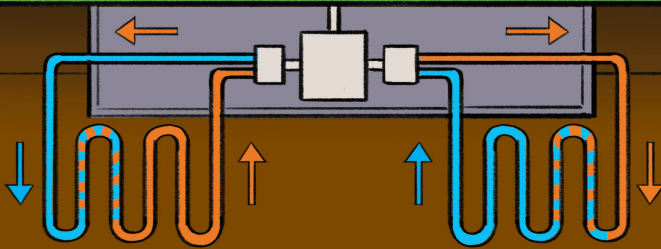
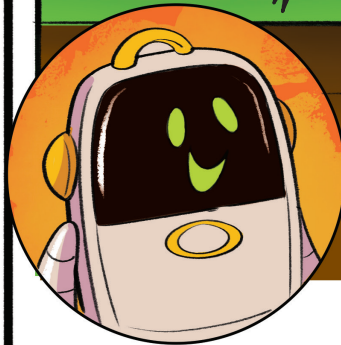
GEE, WHAT'S **ANOTHER** EXAMPLE OF GEOTHERMAL ENERGY?



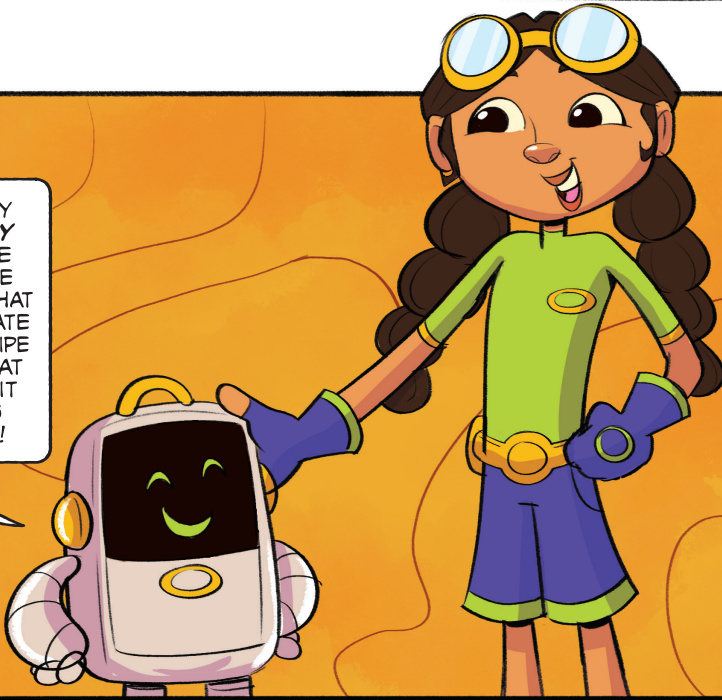
UNDERGROUND HEAT PUMPS HEAT AND COOL HOUSES AND OTHER BUILDINGS!

THE TEMPERATURE ALWAYS STAYS **55° FAHRENHEIT** JUST A FEW FEET BELOW THE SURFACE, WHICH MAKES IT A DEPENDABLE SOURCE FOR "HEAT EXCHANGE."

HOT AIR IN THE **SUMMER** IS ABSORBED AND MADE COOL THROUGH AN UNDERGROUND AQUIFER, AND COLD **WINTER** AIR IS MADE WARM THE SAME WAY!

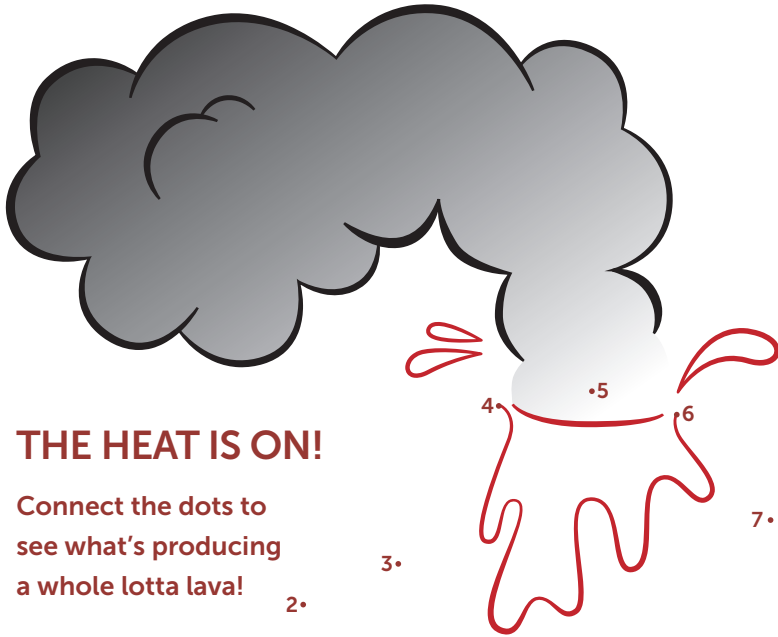


GEOTHERMAL ENERGY IS **ENVIRONMENTALLY FRIENDLY** BECAUSE IT **DOESN'T** PRODUCE GREENHOUSE GASES THAT CONTRIBUTE TO CLIMATE CHANGE. AND ONCE A PIPE IS DRILLED OR A HEAT PUMP IS INSTALLED, IT KEEPS GENERATING ENERGY, NON-STOP!



SUN, WIND, WATER AND NOW **EARTH!** RENEWABLE ENERGY IS **NATURALLY** IN MY ELEMENT!

REE & GEE'S PUZZLE PAGE



THE HEAT IS ON!

Connect the dots to see what's producing a whole lotta lava!

1.

GEOHERMAL WORD SEARCH

E U Y H G D H E A T B L
 N M A E T S Y Y Y J I A
 E L E C T R I C I T Y M
 R E S Y E G A H W F R R
 G V E R O C R E N N I E
 Y W R M A N T L E R B H
 T N E M N O R I V N E T
 N K W M X C R U S T M O
 I Q O U T E R C O R E E
 R P P L O O C L A V A G

Geothermal	Earth	Lava	Mantle
Environment	Heat	Geyser	Power
Outer Core	Cool	Steam	Thermal
Inner Core	Energy	Crust	Electricity

TIME TO EXPLORE!

Travel with Ree & Gee as they dive into a volcano to explore the earth's layers.

