

# MAKING ELECTRICITY WITH PEDAL POWER



NORTHWEST TERRITORIES  
**POWER CORPORATION**

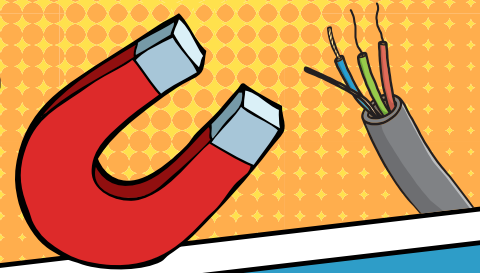
ELECTRICITY IS ALL ABOUT ENERGY!  
CONVERTING IT, MOVING,  
AND STORING IT...

...IN A CONTROLLED WAY!!

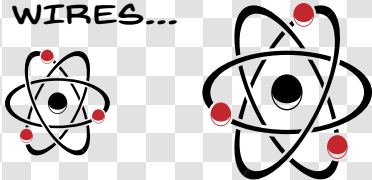
OOPS!

Boom!!

THE STARS OF THE ELECTRICITY STORY ARE WIRES AND MAGNETS.



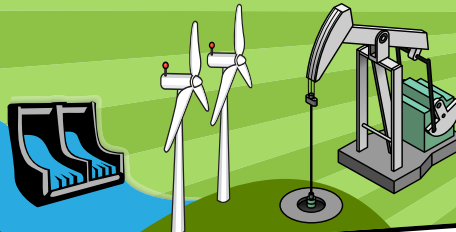
ELECTRICITY AND MAGNETISM ARE BEST FRIENDS. WHENEVER YOU HAVE ONE, THE OTHER IS ALMOST ALWAYS HANGING AROUND TOO. THE SECRET OF THEIR FRIENDSHIP IS IN THE WIRES...



WIRES ARE GOOD CONDUCTORS. THEY HAVE ELECTRONS THAT ARE LOOSELY BONDED WITHIN THEIR ATOMS.

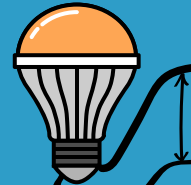
MAGNETIC FORCE ENCOURAGES ELECTRONS TO MOVE.

GENERATORS SPIN MAGNETS INSIDE COILS OF WIRE TO CREATE VOLTAGE...



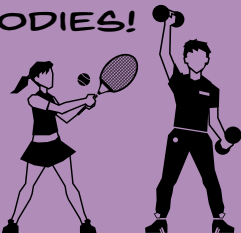
...ENERGY TO CREATE THE SPINNING MOTION CAN COME FROM MANY SOURCES ...

ELECTRON MOVEMENT CREATES ELECTRIC POTENTIAL (VOLTAGE) IN THE WIRE. VOLTAGE CAN BE USED TO PUSH CURRENT THROUGH A CIRCUIT.



CURRENT IS HOW ELECTRICAL ENERGY IS TRANSFERRED FROM ONE PLACE TO ANOTHER

INCLUDING OUR BODIES!



Wow!

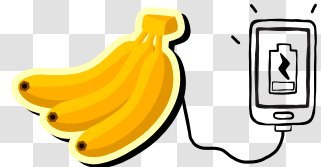
A REGULAR BIKE USES OUR ENERGY TO MOVE FORWARD. THE GENERATOR BIKE USES ALL THE ENERGY WE GIVE IT TO SPIN THOSE MAGNETS.

WROOOM!



WHEN WE RIDE THIS BIKE...

WE ARE USING OUR BODIES TO CONVERT ENERGY FROM FOOD INTO MOTION, AND



USING THAT MOTION TO CREATE ELECTRICITY.

THE END