

WHAT IS ENERGY?

WHY AND HOW DO WE SAVE IT?

I. WHAT IS ENERGY?

Energy is the power that changes things, or makes things happen.

- We think of energy as that which gives off light or heat; or makes cars and ships move; or runs machines like TV's, CD players and vacuum cleaners; or enables factories, like bottle-making plants.
- But energy is also what makes plants grow. And energy – stored in plants and then eaten – makes animals and people grow, and able to move.

II. DIFFERENT SOURCES OF ENERGY

We see different sources of energy in action all the time. Think of ways the following are used:

- **MUSCLES** (bicycle, etc.)
- **WIND** (sailboats, windmills; caused by sun heating the earth)
- **FIRE** (burning wood, or wicks in olive oil)
- **WATER** (damned to generate electricity)
- **FOSSIL FUELS** (coal, petroleum and gas)
- **ELECTRICITY** (85% of electricity is generated by coal-burning plants)
- **THE SUN** (photosynthesis; "**Fossil Fuels**" are "**sun** power" stored in ancient plants; "**wind**" is movement of air caused by the **sun** heating the earth. And even "**muscle power**" uses energy from the **sun** stored in the food we eat!)

III. FINITE AND RENEWABLE SOURCES OF ENERGY

- Some sources of energy are "used up" as we use them. (Some day we will have no more "Fossil Fuels" – coal, petroleum, gas – left.)
- Others, called "Renewable Energy" can perpetually be replaced. (We can plant a tree to create more wood, and as long as the sun shines on the earth we will have wind, thermal and geothermal energy!)

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IV. IV HOW DO WE MAKE SURE WE DON'T RUN OUT OF ENERGY SOURCES?

- The less Fossil Fuels we use, the longer they will last.
- The more "Renewable Energy" we use, the longer Fossil Fuels will last, and the less we will need Fossil Fuels in the long run.

REDUCE... REUSE... RECYCLE...
SAVE ENERGY, DON'T WASTE IT