

ENERGY U



Pre-Visit Activities

Developed July 7, 2009



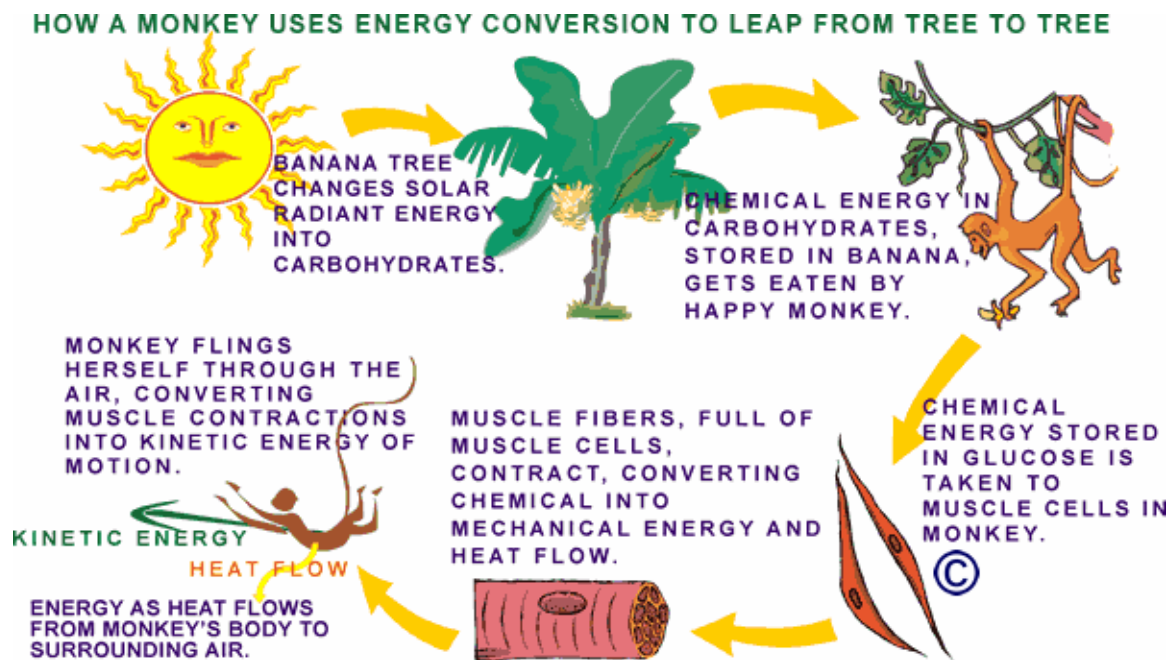
ENERGY U Pre-Visit Activities

Activity 1: Food for Thought

Begin by reminding students what energy is. Ask them to give you examples of different kinds of energy and things that convert energy. Continue by telling the students that they are actually energy converters. Explain that chemical processes like photosynthesis help for the vegetables they eat to grow and that when they eat the vegetables, they in turn change that chemical energy into mechanical energy. Have them provide examples of the chemical-mechanical change. Accept answers like running, jumping, playing soccer, etc.

Activity 2: Putting Energy on the Map

Give students the following worksheet and have them fill in the spaces with the appropriate energy conversions and/or types of energy. The answer key is below.

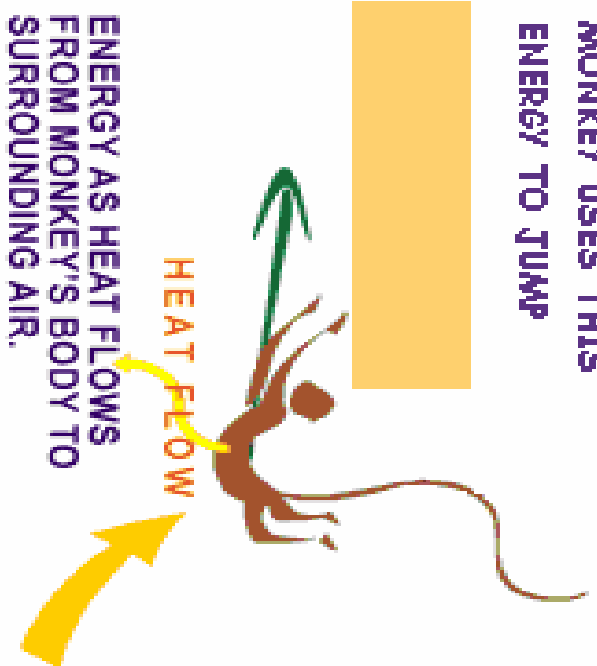


HOW A MONKEY USES ENERGY CONVERSION TO LEAP FROM TREE TO TREE



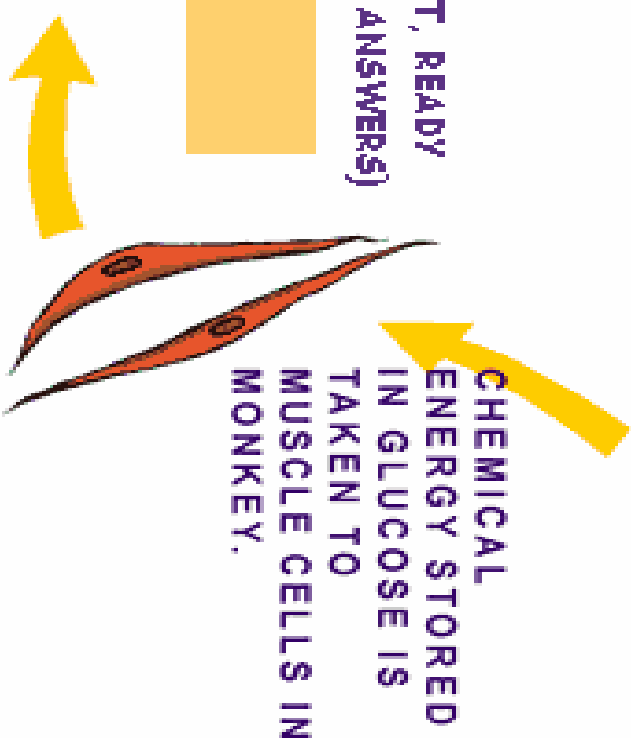
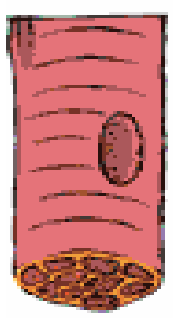
CHEMICAL ENERGY IN CARBOHYDRATES, STORED IN BANANA, GETS EATEN BY HAPPY MONKEY.

MONKEY USES THIS ENERGY TO JUMP



ENERGY AS HEAT FLOWS FROM MONKEY'S BODY TO SURROUNDING AIR.

MUSCLES CONTRACT, READY FOR MOVEMENT (2 ANSWERS)



Activity 3: Energy Scavenger Hunt

To reinforce the students' knowledge of the different types of energy and their definitions, for homework, ask students to find examples of different kinds of energy like the ones listed below.

Types of Energy:

1. Mechanical Energy
2. Electromagnetic Energy
3. Electrical Energy
4. Chemical Energy
5. Thermal Energy
6. Potential Energy
7. Kinetic Energy
8. Nonrenewable Energy
9. Renewable Energy

Resources

<http://www.eia.doe.gov/kids/>

http://www.classroom-energy.org/energy_101/science_of_energy/index.html

<http://www.sciencemuseum.org.uk/energy/site/TeachersActivities.asp>

<http://www.energy.gov/foreducators.htm>

<http://www.ftexploring.com/energy/enrg-types.htm>