Energy Transfers



Supplies Needed:

2 thermometers 2 plastic cups Water soluble markers

To Begin:

- 1. Have your class brainstorm different types of material that they walk on everyday at school. (dirt, sand, wood chips, grass, rocks, etc)
- 2. Pick two of the materials and place them in separate cups. Filling each cup approximately half way.
- 3. Place each cup outside in a very sunny spot. Leave them there for at least an hour.
- 4. After an hour use the thermometers to check the current classroom temperature. Use a marker to draw a line on both thermometers at the current temperature.
- 5. Go outside and insert a thermometer into one of the cups. Wait for the red liquid to stop moving and put a new line on the thermometer reading.
- 6. Repeat this process with the second thermometer and cup.

- 7. When you return to the classroom record the numbers represented on each thermometer. Put them in order from least to greatest.
- 8. Discuss the results: Did both of the materials get warmed by the sun? Did one get warmer than another? Which one was the coolest?
- 9. Journal and illustrate your discoveries.
- 10. Brainstorm any "I wonder..." questions that this experience evoked in the students and add them to a chart. This chart can offer some great continuations or extensions for future lessons.

<u>Health Connection</u>: Personal and Community Health Standard 1: Essential Concepts 1.2.P Describe sun-safety practices.