

Heat and Change

Summary

Students will investigate the heat given off or taken in during a variety of chemical and physical changes.

Time Frame

1 class periods of 60 minutes each

Group Size

Individual

Background for Teachers

It is not necessary or recommended that students be expected to know the terms endothermic or exothermic. They do need to understand the concept that energy change can occur either by energy being given off or taken in during a chemical reaction. It is difficult for students to separate chemical and physical changes based on energy. Energy changes are often required for physical change to occur but are not actually created in the reaction. It is a fine point and one that the students will probably need some help to get to.

Student Prior Knowledge

understand the concept that energy change can occur either by energy being given off or taken in during a chemical reaction

Instructional Procedures

Read the introduction and discuss it with the students. Show them where the materials are found.

If students are unfamiliar the thermometers or CBLs, instruct them on their use. Have them take several readings to make sure they can do it. The directions for the CBLs are as follows:

Allow time for the students to investigate the energy changes in the substances.

Have students summarize their results on the board or an overhead by tallying the number of groups that think the change is chemical or physical.

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)