Educational Innovations, Inc.

NGSS Correlations

Heat-Sensitive Paper
HEA-200/250/285/265/270

Elementary

2-PS1-1
Students can use Heat Sensitive Paper to plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

2-PS1-4
Students can use Heat Sensitive Paper to collect data to construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

4-PS3-2
Students can use Heat Sensitive Paper to make observations to provide evidence that energy can be transferred from place to place by heat currents.

Middle School

MS-PS3-3
Students can use Heat Sensitive Paper to apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.

MS-PS3-4
Students can use Heat Sensitive Paper for an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.

DCI-MS/PS3.A: Definitions of Energy.
The temperature is a measure of the average kinetic energy of particles of matter. The Heat Sensitive Paper create a thermal print when acted on by an object, such as your hand. Each color represents a different temperature.

High School

HS-PS3-4
Students can use Heat Sensitive Paper to plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (Second Law of Thermodynamics).

Suggested Science Idea(s)

4-PS3-2
Students can place their hands on the Heat Sensitive Paper to observe the transfer of heat energy to the surface of the temperature sensitive material. Each color represents a different temperature.

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MS-PS3-3
Each color represents a different temperature as students test a device that either minimizes or maximizes thermal energy transfer.

MS-PS3-4
Students can use the Heat Sensitive Paper for an investigation to determine the relationships among the energy transferred by different objects.

HS-PS3-4
Students can use the Heat Sensitive Paper for an investigation to determine the relationships among the energy transferred by different objects.

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