

A young girl with blonde hair, wearing a white lab coat and a pearl earring, is leaning over a wooden table. She is holding a black smartphone with a thermal camera attachment. The background is a bright, out-of-focus classroom setting.

ILLUMINATING EDUCATION WITH INFRARED

Bringing Thermal Imaging Into the Classroom



The World's **Sixth Sense**[®]



THERMAL IMAGING IN A CLASSROOM

FLIR thermal cameras give students the opportunity to learn about heat and temperature in an interactive and engaging way. Instead of reading about friction, they're able to see how it works in real life. Rather than explain insulation, they can see firsthand the rate and speed of heat loss. FLIR's EDU Kit is a tool for discovery in the study of Science, Technology, Engineering & Math.

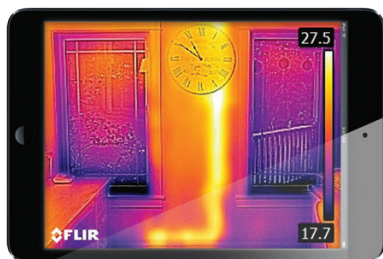
MAKING DIFFICULT CONCEPTS EASIER TO UNDERSTAND

Many concepts that involve heat and heat transfer are very theoretical and not always easy for students to understand. Using the FLIR infrared camera, difficult theory and equations come to life as colorful thermal images, making them easy for teachers to explain. A few concepts that can be easily visualized with a thermal imaging camera include:

- Thermal properties of materials and objects
- Heat conduction, convection, & radiation
- Heat insulation
- Friction
- Energy transformation
- Phase change

FLIR also provides educational resources to assist with using thermal infrared in the classroom as part of your existing curriculum. These resources include downloadable lesson plans, white papers, application notes, and training videos to aide in students' exploration of STEM. For available resources, consult our website: www.flir.com/education

Thermal images from the FLIR C3™ can be easily downloaded to a PC, Mac or tablet for viewing and analysis.



THE PERFECT TOOL FOR VISUALIZING TEMPERATURE

The FLIR C3™ is a full-featured, pocket-sized thermal camera. Affordable, lightweight, and small, it is the perfect tool for classroom use.

FLIR C3 produces thermal images of 80 x 60 pixels. Temperatures can be read from each of the 4,800 pixels. Images can be stored inside the camera and recalled for on-camera analysis. Additionally, the C3 Education Kit includes software for real-time streaming and recording of thermal movies.

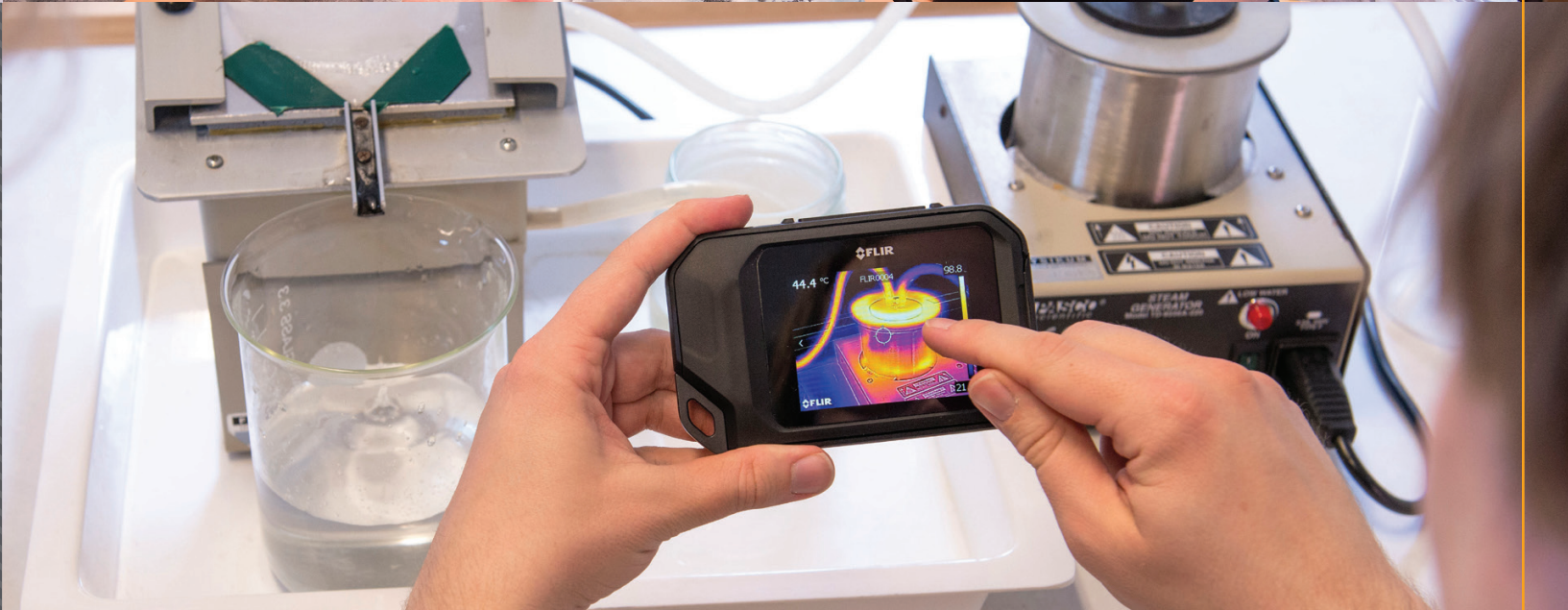
FLIR C3 is easy-to-use. A brilliant 3" intuitive touch screen with auto orientation allows easy and quick access to all camera functions.

FLIR C3 also incorporates a visible camera. FLIR-patented Multi-Spectral Dynamic Imaging (MSX) overlays the thermal image with the visual image so you get thermal images that are clear and easy to understand..

FLIR C3™



The power of Thermal Imaging and the FLIR EDU Kit can bring science to life and open up whole new scientific experiments by revealing the infrared spectrum to young students.



SPECIAL PRICE EDUCATIONAL KIT

FLIR Systems is bringing the power of thermal imaging to elementary schools, high schools and other educational institutes with the specially-priced C3 Education Kit.

FLIR C3 Education Kit includes:

- FLIR C3 Thermal Imaging Camera with integrated tripod mount
- ResearchIR Software
- Access to FLIR education content with lectures, experiments, and teacher's guides.

This kit is available at an exclusive discount for educators and students. It has been specifically designed as a complementary technology to classroom instruction, student labs, and exercises. It is only available to qualified educational institutions, educators, and students. Visit www.flir.com/education to learn more.



Frederick William Herschel

Infrared energy was discovered in 1800 by astronomer Sir Frederick William Herschel. In an effort to learn more about why different colors of light had different temperatures, he directed sunlight through a glass prism to create a spectrum and then measured the temperature of each color. He found that the temperatures of the colors increased from violet to red.

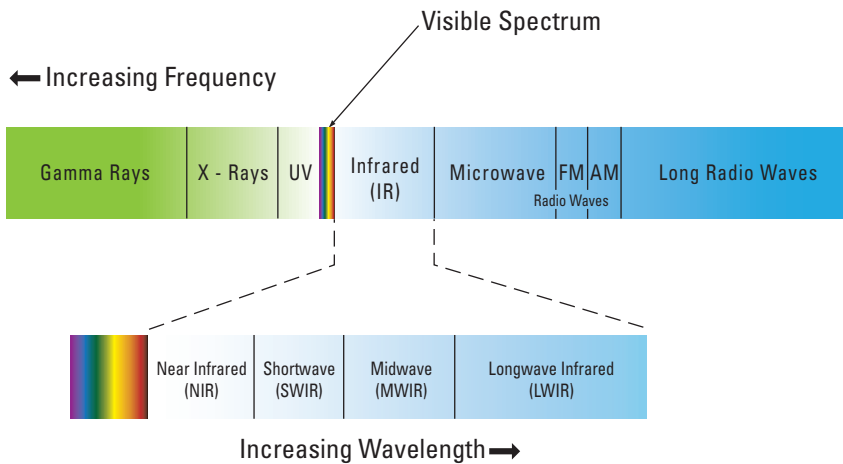
After noticing this pattern Herschel decided to measure the temperature just beyond the red portion of the spectrum in a region where no color was visible. To his surprise, he found that this region had the highest temperature of all.

Go to www.FLIR.com to see where infrared has come since his discovery



WHERE DOES INFRARED RADIATION COME FROM?

A thermal imaging camera records the intensity of radiation in the infrared part of the electromagnetic spectrum and converts it to a visible image. Our eyes are detectors that are designed to detect electromagnetic radiation in the visible light spectrum. All other forms of electromagnetic radiation, such as infrared, are invisible to the human eye. The primary source of infrared radiation is heat or thermal radiation. We experience infrared radiation every day. The heat that we feel from sunlight, a fire or a radiator is all infrared. Although our eyes cannot see it, the nerves in our skin can feel it as heat. The warmer the object, the more infrared radiation it emits.



FLIR C3™ Education Kit comes standard with a tripod mount. Easy for setting up experiments.

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The World's Sixth Sense®

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