# #9382 SAFE AND SECURE IN THE 21<sup>ST</sup> CENTURY

ALLEGRO PRODUCTIONS 2000 Grade Levels: 3-8 13 minutes

# DESCRIPTION

Our lives will be safer by using new advances in technologies in surveillance, identification, and criminal pursuit. Features real examples of successful applications of surveillance cameras, facial recognition systems, and others.

# ACADEMIC STANDARDS

# Subject Area: Technology

- Standard: Understands the relationships among science, technology, society, and the individual
  - Benchmark: Knows ways in which technology and society influence one another (e.g, new products and processes for society are developed through technology; technological changes are often accompanied by social, political, and economic changes; technology is influenced by social needs, attitudes, values, and limitations, and cultural backgrounds and beliefs)

# **INSTRUCTIONAL GOALS**

- 1. To illustrate how technology is being employed to reshape the world.
- 2. To demonstrate how authorities are looking for new ways to keep people safe from criminals, terrorists, and disasters.
- 3. To explore the issue of security in the 21<sup>st</sup> century.
- 4. To observe techniques of identification.
- 5. To depict how computers can be used to create models and simulations designed to predict disaster and prevent injury when it does occur.

# **BACKGROUND INFORMATION**

New technology is being employed to reshape the world and change almost everything about the way we live. Information is gathered on each of us. Authorities are looking for new ways to keep us safe from criminals, terrorists, and disasters.

This video explores the issue of security in the coming decades. Surveillance will probably be ubiquitous, especially in high-risk areas.

Identification technology will reach far beyond the fingerprint and DNA. Students will see how "smart water" can be used to stain burglars with compounds revealed under ultraviolet



light. This will make is possible to track down thieves anywhere in the world and link them to the scene of the crime. Even a footprint will be enough in the future to make a positive identification. Eventually, even our faces will be stored and read by computers, enabling the apprehension of criminals and making it easier to track missing persons.

Models and simulations will be designed on computers that allow scientists to predict disasters and prevent injuries when they do occur.

By taking advantage of technology, we may create a world in which we can enjoy our lives to the fullest, safe and secure in the knowledge that someone is keeping watch on crime, terrorism, and potential disasters.

# VOCABULARY

- 1. audio
- 2. concoction
- 3. culprit
- 4. doused
- 5. infrared
- 6. monitor
- 7. predict
- 8. recognition
- 9. respond
- 10. strategic
- 11. surveillance
- 12. terrorism

## **AFTER SHOWING**

## **Discussion Items and Questions**

- 1. What kinds of surveillance did the video mention?
- 2. What's the difference between *audio* and *video* surveillance?
- 3. What are some uses of surveillance the video did not mention?
- 4. What does "smart water" do?
- 5. What are some other identification techniques that may be in use during the millennium?
- 6. Have students discuss possible ways to use computers to identify human beings that are not mentioned in the video.
- 7. What are some alternative uses for smart water, facial and voice recognition, and video surveillance?
- 8. Discuss how the future is created by the actions of today, and ask students to suggest methods that might influence the outcome.

# **Applications and Activities**

- 1. Have students research futuristic technology and report their findings.
- 2. Assign an essay in which students describe the future as they imagine it to be.

## **RELATED RESOURCES**



# **Captioned Media Program**

• Fighting Fire #9150

# World Wide Web

The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

## • FBI KIDS PAGE

## http://www.fbi.gov/kids/k5th/kidsk5th.htm

Read about the history of the Federal Bureau of Investigation, follow the duties of officers and see how they solve crimes using fingerprints, DNA results, and other conclusions. For Grades K-5.

#### • FBI YOUTH

## http://www.fbi.gov/kids/6th12th/6th12th.htm

See how the Federal Bureau of Investigation investigates cases, go on an FBI adventure, discover what a day in the life in the FBI is like, read about its history, and more. For Grades 6-12.

## • DOJ KIDS AND YOUTH

# http://www.usdoj.gov/kidspage/

Click on grade-appropriate buttons on this U.S. Department of Justice site to "Getting Involved in Crime Prevention" and click on "Subjects" to examine fingerprint identification, DNA testing, and more.

## APB DATA CENTER

#### http://www.apbnews.com/resourcecenter/datacenter/index.html

Eight channels and 26 programs are available on crime, justice, and safety on this site. "Crime Solvers," "Criminal Justice Professionals," are a couple examples. Discover how DNA leads to clues and eventually, to capture of some criminals.