AOHS Health Careers Exploration

Lesson 10

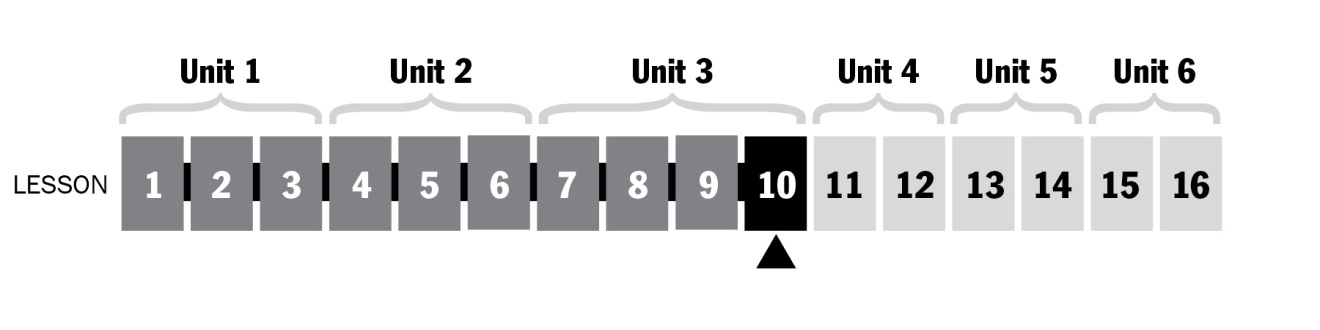
Providing Patient Care

In this lesson students learn about important aspects of patient care, such as breaking the chain of infection and cleaning and dressing wounds. They also learn why nurses chart information and some of the guidelines that nurses follow when they chart. They apply the information that they learned by preparing a presentation in which they train patients to care for their wounds. Students also participate in a structured check-in about the progress on their culminating project.

Advance Preparation

* Assemble the equipment necessary for students to learn how to put on sterile gloves and how to clean and dress a wound (see Equipment and Supplies below). You may need to modify the instructions for this activity depending on the equipment and resources that are available for your classroom.
* Your students may need some review or instruction of prerequisite science vocabulary for this lesson. To provide vocabulary support, use Teacher Resource 10.7, Vocabulary Support: Terms to Know for the Lesson (separate PowerPoint file). Depending on your classroom situation and the needs of your students, you can present the slides using an LCD projector and discuss the meaning of each term, print the slides as miniposters and hang them in the classroom for students to view as necessary, or print four to six slides on a page and give copies to students who need extra help with vocabulary.
* In Class Periods 3, 5, and 6, students will need computers with Internet access to conduct research and Microsoft PowerPoint.

This lesson is expected to take 6 class periods.



Lesson Framework

Learning Objectives

Each student will:

* Explain the role nurses can play in infection control through treatment and education
* Describe the importance of nurse charting and explain how it is used\*
* Demonstrate knowledge of common abbreviations used in nursing
* Describe the procedure nurses follow to treat a wound

\*This is one of the 16 key learning objectives assessed by the NAFTrack Certification end-of-course exam for this course.

Academic Standards

The relevant Common Core state Standards are too extensive to list here but are an important basis for this lesson. For details, please refer to the separate document “Correlations to the Common Core Standards” (available in the Course Planning Tools section of the course materials).

* Record time using the 24-hour clock (National Healthcare Foundation Standards 2011, Standards 1.33)
* Interpret verbal and nonverbal communication (National Healthcare Foundation Standards 2011, Standard 2.11)
* Report subjective and objective information (National Healthcare Foundation Standards 2011, Standard 2.13)
* Apply speaking and active listening skills (National Healthcare Foundation Standards, 2011 Standard 2.15)
* Use medical abbreviations to communicate information (National Healthcare Foundation Standards 2011, Standard 2.22)
* Recognize elements of written and electronic communication (spelling, grammar, and formatting) (National Healthcare Foundation Standards 2011, Standard 2.31)
* Apply procedures for accurate documentation and record keeping (National Healthcare Foundation Standards 2011, Standard 5.12)
* Demonstrate respectful and empathetic treatment of ALL patients/clients (customer service) (National Healthcare Foundation Standards 2011, Standard 6.32)
* Explain principles of infection control (National Healthcare Foundation Standards 2011, Standard 7.11)
* Describe methods of controlling the spread and growth of microorganisms (National Healthcare Foundation Standards 2011, 7.12)
* Apply safety techniques in the work environment (National Healthcare Foundation Standards 2011, 7.31)
* Understand implications of hazardous materials (National Healthcare Foundation Standards 2011, 7.42)
* Identify records, files and technology applications common to healthcare (National Healthcare Foundation Standards 2011 Standards 11.12)
* Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career (Common Career Technical Core 2012, HL-1)
* Explain the healthcare worker’s role within their department, their organization, and the overall healthcare system (Common Career Technical Core 2012, HL-2)
* Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care (Common Career Technical Core 2012, HL-4)
* Utilize communication strategies to answer patient/client questions and concerns on planned procedures and goals (Common Career Technical Core 2012, HL-THR 1)
* Communicate patient/client information among healthcare team members to facilitate a team approach to patient care (Common Career Technical Core 2012, HL-THR 2)
* Utilize processes for assessing, monitoring and reporting patient’s/client’s health status to the treatment team within protocol and scope of practice (Common Career Technical Core 2012, HL-THR 3)
* Evaluate patient/client needs, strengths and problems in order to determine if treatment goals are being met (Common Career Technical Core 2012, HL-THR 4)

Assessment

| Assessment Product | Means of Assessment |
| --- | --- |
| Student presentation on training patients in wound care (Student Resource 10.2,) | Assessment Criteria: Training Patients in Wound Care (Teacher Resource 10.3) |
| Professional profile sheet (Student Resource 10.9) | Assessment Criteria: Professional Profile Sheets (Teacher Resource 10.4) |

Prerequisites

* Knowledge of the roles and responsibilities of nurses
* Knowledge about public health
* Knowledge about nurse-patient interaction and communication
* Knowledge about elements of an effective presentation
* Knowledge of the proper procedure for hand washing

Instructional Materials

Teacher Resources

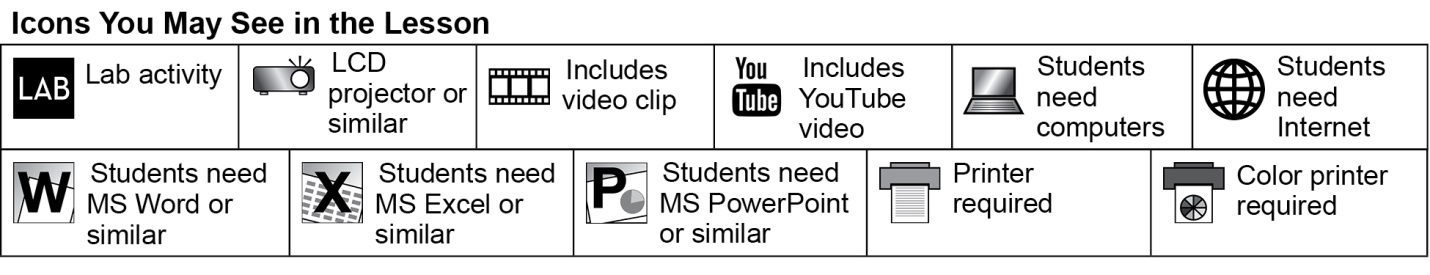
* Teacher Resource 10.1, Answer Key: Changing a Wound Dressing
* Teacher Resource 10.2, Presentation and Notes: Infection Control in a Hospital (includes separate PowerPoint file)
* Teacher Resource 10.3, Assessment Criteria: Training Patients in Wound Care
* Teacher Resource 10.4, Assessment Criteria: Professional Profile Sheets
* Teacher Resource 10.5, Vocabulary: Providing Patient Care
* Teacher Resource 10.6, Bibliography: Providing Patient Care
* Teacher Resource 10.7, Vocabulary Support: Terms to Know for the Lesson (separate PowerPoint file)

Student Resources

* Student Resource 10.1, Ordering Procedural Steps: Changing a Wound Dressing
* Student Resource 10.2, Presentation Assignment Sheet: Training Patients in Wound Care
* Student Resource 10.3, Note Taking: Infection Control in a Hospital
* Student Resource 10.4, Reading: Infection Control in a Hospital
* Student Resource 10.5, Lab: Sterile Glove Procedure
* Student Resource 10.6, Reading: Nurse Charting
* Student Resource 10.7, Practice: Nurse Charting
* Student Resource 10.8, Lab: Dressing a Wound
* Student Resource 10.9, Culminating Project: Professional Profile Sheets

Equipment and Supplies

* LCD projector and computer for PowerPoint presentation
* Computers with Internet access and Microsoft PowerPoint
* Whiteboard, blackboard, or flip chart
* Equipment for cleaning and dressing a wound, ideally one set per student: at least two pairs of sterile gloves (ideally non-latex Nitrile gloves to avoid a possible allergic reaction), saline solution, small dish, tape, sterile dressing, gauze sponge, waste bag, medical tray. Glo Germ and a UV light are optional equipment that would allow students to see if they succeeded in maintaining sterile gloves.
* Sticky notes



Lesson Steps

| Step | Min. | Activity |
| --- | --- | --- |
|  |  | class period 1 |
| 1 | 10 | Ordering Procedural Steps: Changing a Wound Dressing  The purpose of this activity is help students understand why it’s important to pay attention to detail when applying different nursing procedures to patients.  Tell students that in this lesson they will be experiencing a bit of what it's like to be a nurse. It is a challenging job because nurses have important responsibilities for their patients' physical and emotional well-being. Point out that something like changing a wound dressing, which may seem like a simple procedure, has 12 steps that need to be performed in the correct order.  Have students work in pairs, and refer them to Student Resource 10.1, Ordering Procedural Steps: Changing a Wound Dressing. Go over the instructions on the resource as a class, and point out the example. When everyone is clear on what they are supposed to do, have pairs get to work numbering the steps to indicate the correct order. Emphasize that students should use what they already know to predict the correct order of the 12 steps.  When students have completed the resource, review the answers using Teacher Resource 10.1, Answer Key: Changing a Wound Dressing.  To conclude, summarize that it is important to follow all the nursing procedures steps carefully in order to avoid jeopardizing the health and safety of the patient and the health care worker.  Point out to students that changing a wound dressing, or bandage, is an important nursing role, and that in this lesson they will have a chance to practice this fundamental procedure. |
| 2 | 10 | Student Presentation Preparation: Training Patients in Wound Care  This activity gets students started thinking about and gathering notes for a presentation they will present later in the lesson.  Divide your class into six groups. (If this would mean more than four students per group, you may want to assign some topics to more than one group in order to limit group size to four students.)  Explain to students that in this lesson they will take on the role of nurse educators, and near the end of the lesson they will deliver a presentation to patients and caregivers about how to care for a wound. The presentation is divided into six parts. Each group will have four minutes to deliver one part of the presentation. Assign one of the following parts of the presentation to each group:  How infection spreads  Preventing infection  How to undress and clean your wound  How to dress your wound  Signs that your wound is healing  When to call your doctor  Tell students that throughout the lesson they will collect information to use in the presentation. Refer students to Student Resource 10.2, Presentation Assignment Sheet: Training Patients in Wound Care. Instruct students to read the entire assignment sheet in their groups. Then answer any questions students have about the assignment or the assessment criteria.  Explain to students that they will need to take notes for their presentation as they work through the activities in this lesson, and then they will begin working on their presentation in Class Period 3. |
| 3 | 20 | Presentation: Infection Control in a Hospital  This activity gives students an in-depth look at the chain of infection in a hospital setting and actions that health care workers take to break the chain. It also develops students’ listening and note-taking skills.  To prepare, make notes to guide class discussion using Teacher Resource 10.2, Presentation Notes: Infection Control in a Hospital. Have Teacher Resource 10.2, Presentation: Infection Control in a Hospital (separate PowerPoint file), ready to show as a full-screen slideshow using an LCD projector.  Refer students to Student Resource 10.3, Note Taking: Infection Control in a Hospital. Tell students that they will use this sheet to take notes on the chain of infection in a hospital and the ways that health care workers prevent the spread of infection. Have students read the directions and then answer any questions that they might have.  Present the slideshow. Use the notes you prepared and the questions on the slides to encourage class discussion.  This presentation is duplicated as Student Resource 10.4, Reading: Infection Control in a Hospital. If an LCD projector is unavailable, students can read the presentation, answer the discussion questions in their notebook, and discuss their answers as a class. This student resource is also useful for review.  After the presentation, divide the class into pairs or groups of three and have them compare their notes for completeness and accuracy. Invite each pair or triad to share their thoughts and questions.  Explain that some of the techniques that health care workers use to break the chain of infection in a hospital, such as hand washing, can be used in daily life as well. Conclude by having students share ideas about daily practices that can be taken to stop the spread of infection at school. |
| 4 | 10 | Lab: Sterile Gloves Procedure  The purpose of this activity is to introduce students to the procedure of putting on sterile gloves. If possible, have students use Glo Germ to check for contamination after they have put on gloves. When planning for this activity, be sure to get non-latex gloves as a student may have an undisclosed latex allergy. Nitrile gloves are a good alternative choice.  Tell students that in this activity they will learn how to put on sterile gloves, a fundamental skill for nurses and many other health care workers. Explain that while putting on gloves may seem like an easy task, it is actually quite challenging to do it the right way. Ask students to tell a partner reasons why health care workers wear gloves and why it is important that the gloves are sterile, and then have pairs share their responses with the class.  Refer students to Student Resource 10.5, Lab: Sterile Glove Procedure. Ask students to read the directions. Then demonstrate how to put on a pair of gloves. Read each step aloud and then show students how to perform the step.  **Note**: If it would be difficult for all of your students to see you demonstrate this lab, you may wish to show this brief video of the procedure instead of conducting a demonstration: “Sterile Gloving” (<http://www.youtube.com/watch?v=pAKZ3mdFIj4>). If your school does not allow access to YouTube, you may wish to download the video to your computer in advance using KeepVid (see [keepvid.com](http://www.keepvid.com)) or a similar program.  After the demonstration, answer questions that students might have, and make packages of sterile gloves available to students. Instruct them to put on the gloves according to the sterile procedure, and make every effort not to contaminate them.  If you are using Glo Germ to check for contamination, follow the instructions for Glo Germ available at <http://www.glogerm.com/using.html>. After students put Glo Germ on their gloves, you will need a UV light to check for contamination.  Allow students to share with the class what part of the procedure was most challenging and anything they will do differently the next time they put on sterile gloves.  To conclude, summarize that for health care careers, including nursing, following instructions precisely and in order is a mandatory skill. |
|  |  | Class Period 2 |
| 5 | 30 | Reading and Practice: Nurse Charting  The purpose of this activity is to give students an overview of charting, including why the task is important and guidelines that nurses follow when they chart.  Explain to students that each time a nurse interacts with a patient he or she must record information about the interaction on the patient’s chart. Tell students that this task, often called charting, is one of the most important responsibilities that a nurse has. Point out that while there are some standards to charting, the exact details of what is written on charts vary depending on the policies and procedures of the hospital or clinic where the nurse works. Also point out that more health care facilities are having nurses chart electronically using EMRs (electronic medical records), which improve the level and consistency of patient care.  Ask students to share their ideas of what nurses might include on a patient’s chart, and make a list on the board.  Next, refer students to Student Resource 10.6, Reading: Nurse Charting, and Student Resource 10.7, Practice: Nurse Charting. Go over the instructions and the different sections of the charting practice as a class. Explain to students that as they read the reading, they should highlight any information that they think will help them to complete the charting practice.  Instruct students to complete the reading and fill in all sections of the charting practice. Circulate while students are working to answer any questions they have about the charting practice.  When students have completed the charting practice, go over the answers as a class, and answer any questions students have.  Conclude by pointing out that the attention to detail required to chart properly is a college and career skill needed in many health care professions. |
| 6 | 20 | Lab: Dressing a Wound  The purpose of this activity is for students to develop the skills and knowledge needed to clean and dress a wound.  Have students assemble in groups of three, and refer them to Student Resource 10.8, Lab: Dressing a Wound. Explain that students will take turns playing the roles of nurse, patient, and observer, and that they will practice cleaning and dressing a wound. Instruct students to read the directions, and then answer any questions students might have. Emphasize that students should read through all of the steps before beginning. Then pass out a set of equipment to each student, including two pairs of sterile gloves, saline solution, a small dish, tape, sterile dressing, a gauze sponge, a waste bag, and a medical tray, to each student.  Circulate as students work, reminding them that they can use any relevant information from the lab in their nurse educator presentation that they will work on in the next class period.  When students have completed the lab, ask them to name skills that they think are necessary to perform the task well. Point out that skills like following directions closely, staying calm, and being observant are relevant in many health care professions. |
|  |  | Class Period 3 |
| 7 | 50 | Student Presentation Preparation: Training Patients in Wound Care  The purpose of this activity is for students to take on the role of nurse educators and develop presentations that educate patients about caring for wounds.  It focuses on the following college and career skills:  Demonstrating teamwork and collaboration  Prioritizing and completing tasks without direct oversight  Have students assemble in their nurse educator groups. Then refer students to Step Two of Student Resource 10.2, Presentation Assignment: Training Patients in Wound Care. Instruct students to read the instructions for creating their presentation, go over the assessment criteria as a class, and then answer any questions that students might have. Emphasize that students can structure their presentation with as many slides as they determine are necessary, but that the presentation should not exceed four minutes. Remind them that each member is responsible for at least one slide and that they should keep the target audience closely in mind as they work.  Circulate as students work, answering questions they might have.  Near the end of the class period, explain that students will have 10 minutes in the next class period to practice their presentation, and that they should divide up any remaining work for homework. They should come to the next class period with all slides and demonstration materials ready to go. Remind them to check their work against the assessment criteria. |
|  |  | Class Period 4 |
| 8 | 10 | Student Presentation Preparation: Training Patients in Wound Care (Continued)  In this activity, students practice presenting their presentation.  Have students assemble in their nurse educator groups and instruct them to go through their presentation twice, as if they were presenting it to an audience. Remind them to think about observing good presentation techniques. Tell them they have 10 minutes to practice, and then the presentations will begin. |
| 9 | 40 | Student Presentations: Training Patients in Wound Care  In this activity students present their presentations to the class and interact with the audience. It also focuses on the following college and career skills:  Demonstrating the ability to speak effectively  Demonstrating the ability to listen effectively  Begin by explaining that during the presentations the audience will take on the roles of patients who have healing wounds and caregivers. Tell students that after each presentation, the nurse educator group will have a few minutes to answer questions that the patients or their caregivers may have. Explain that the nurse educators may also use this time to make sure that the audience is clear about the information that they’ve been given. Encourage the nurse educators and audience to interact with each other after each presentation. Instruct students in the audience to jot down in their notebook questions that come up for them in their roles as patients and caregivers as they watch each presentation.  Then have the nurse educator groups present in the following order:  How infection spreads  Preventing infection  How to undress and clean your wound  How to dress your wound  Signs that your wound is healing  When to call your doctor  After each presentation, allow a few minutes for the nurse educators to interact with the audience. Assess the presentations using Teacher Resource 10.3, Assessment Criteria: Training Patients in Wound Care.  When groups have finished presenting, ask students to share with a partner one challenge they felt about taking on the role of an educator, and then have pairs share their responses with the class.  To conclude, point out that the ability to present information in a clear and concise way is a career skill that nurses work on developing over time. |
|  |  | Class Period 5 |
| 10 | 50 | Culminating Project Work: Completing Professional Profile Sheets  The purpose of this activity is for students to complete all of the professional profile sheets that they have been working on so far for their culminating project and to choose one professional profile sheet to submit for assessment.  Instruct students to assemble in their culminating project groups. Explain that they will have 40 minutes to work on their professional profile sheets in their group, and in the next class period they will submit one of their professional profile sheets for assessment. Refer students to Student Resource 10.9, Culminating Project: Professional Profile Sheets. Have groups read through the steps on the sheet, and then answer any questions they have about how to proceed. Go over the assessment criteria for professional profile sheets as a class, and instruct students to make sure that their professional profile sheets meet all of the assessment criteria.  Students should be able to access the Internet to conduct research and find information they need for their professional profile sheets.  Circulate as groups are working; make sure that all groups are making progress and that all students in the group are assigned a specific profile sheet to be working on. Check with the project manager and review his or her tracking sheet to see what progress has been made on professional profile sheets.  In the final 10 minutes of class, have groups trade the professional profile sheet they are going to submit for assessment with another group. Ask groups to check their peers' professional profile against the assessment criteria and use sticky notes to indicate the following:  What is one important piece of information that you learned from the sheet?  What is one thing that you would improve about the sheet?  Inform students that if they need to make changes to their professional profile based on their peers’ comments, they can submit their work for assessment at the beginning of the next class period. Use Teacher Resource 10.4, Assessment Criteria: Professional Profile Sheets, to assess students’ work. |
|  |  | CLASS PERIOD 6 |
| 11 | 50 | Culminating Project Work: Check-in and Task Management  The purpose of this activity is to have students catch up on unfinished culminating project work and participate in a structured check-in.  Ask students to assemble in their culminating project groups. Write the following tasks on the board and review them with students. Tell groups that the project manager should lead a group discussion about the tasks, and then as a group they should divide up tasks.  Is there information you need to add to the disease profile?  Are the group files current? Check in with the file manager about work that needs to be done.  Is the resource list current? Check in with the resource manager about resources that need to be added to the list.  What is the status of interviews that need to be scheduled?  Are there professional profile sheets for this unit that still need to be completed?  Are there any other tasks that need to be done to complete the project work that you’ve worked on in this unit?  Instruct groups to go over each of the tasks and use the rest of the class period to work on any unfinished items.  Advise students that you will be checking in with each group’s project manager about the group’s progress so far on their pamphlet work. Tell project managers to have their tracking sheet ready so that you can sign off on work they have completed. (This is the project tracking sheet they began working with in Lesson 4.)  Near the end of the class period, tell students they will now have a chance to share information about their project with the class. Write the following question on the board:  Name two professionals you’ve learned about so far and summarize briefly what they do to help patients with the disease.  What is one thing that you’ve learned so far that the members of the interdisciplinary team who work with patients who have the disease have in common?  Allow groups a few minutes to discuss their responses among themselves, and then ask one group member to represent the group and respond to the class. After each group has given the group’s response, allow students a few minutes to ask the group questions about the disease and the interdisciplinary team who work with patients who have the disease. Encourage group members to take turns responding to the questions.  If students have not completed all of their professional profile sheets for this unit at the end of this class period, ask them to divide up the work for homework. Point out that they will be creating their project pamphlet in just a couple weeks, and they need to keep on top of all the work required to create an effective pamphlet.  To conclude, explain that working on long-term projects is common in college and in many careers. Point out that staying on top of the tasks that need to be accomplished for their pamphlet is helping them develop the skills they will need to complete long-term projects in both college and their career. |

Extensions

Enrichment

* Explain to students that telenurses are nurses who offer care remotely, often through advice lines. For example, a patient may speak to a telenurse on the phone about how to properly clean a wound. Have students research the roles and responsibilities of a telenurse. Then have them work in groups to design the concept for a Smartphone application that patients can use to interact with a telenurse.
* Arrange for an infection-control nurse to speak to the class. Prepare the guest speaker by providing a list of topics in advance that he or she will be asked about during the classroom visit.Explain to students that just as there is a proper procedure for putting on sterile gloves, there is also a procedure for removing contaminated gloves. Instruct students to watch this brief video about removing gloves: <http://www.youtube.com/watch?v=S4gyNAsPCbU&feature=related>. If your school does not allow access to YouTube, you may wish to download the video to your computer in advance using KeepVid (see [keepvid.com](http://www.keepvid.com)) or a similar program. Then have students practice the procedure. When students are comfortable performing the procedure, have them write step-by-step instructions for removing contaminated gloves.
* Have students create flash cards for the medical abbreviations nurses use when they chart. Ask students to work in pairs to quiz each other. Common medical abbreviations can be found here: <http://www.globalrph.com/abbrev.htm>

Technology Integration

* Using digital photography, have students create illustrated, in-dept manuals that provide instructions for patients on how to properly care for a healing wound. You may wish to use this activity to support students’ work in their nurse educator groups.

Cross-Curricular Integration

* English Language Arts/Drama: Lead a discussion about the ways that nurses are portrayed in television shows. Then have students work in small groups to write the script for a scene in a fictional television show that features a nurse in a medical setting. Tell students that their scene should be as realistic as possible, based on what they have learned about the roles and responsibilities of nurses. Have groups act out their scenes and rate them based on believability.
* Science: Ask students to research and create charts that compare and contrast the classes of microorganisms: bacteria, protozoa, fungi, rickettsia, and viruses. Instruct them to include information about diseases caused by the microorganisms and the most effective ways of fighting them.
* Science: Point out to students that most medical facilities make hand sanitizer available in public areas. Ask students to design a science experiment in which they test three different waterless hand sanitizers and determine which is the most effective. Advise students to wash hands after every fifth use of sanitizer. Have them use what they’ve learned about the chain of infection as they design their experiment.