UNIT: FIRST AID

ACT-Based Science: Evaluating First Aid Effectiveness

### Here are ACT-aligned science activities for First Aid Kits that help students explore human body systems, wound healing, and the effectiveness of emergency treatments through observation, analysis, and real-world application.

### Objective:

Students will compare first aid treatments for different injuries

MATERIALS NEEDED:

* First aid guidebook
* Sample injury cases

STUDENT DIRECTIONS:

**Goal:**

You will learn how to evaluate different first aid treatments for various injuries by matching injuries to their proper care, analyzing the benefits and drawbacks of these treatments, and practicing how to respond correctly in simulated situations.

**STUDENT DIRECTIONS:**

**Step 1: Review the First Aid Guidebook**

* Begin by carefully reading the sections in your **First Aid Guidebook** related to treating common injuries such as burns, cuts, sprains, and abrasions.
* Pay attention to key treatment steps, safety tips, and any warnings or cautions.

**Step 2: Match Injuries with Correct Treatments**

* You will receive a set of **Sample Injury Cases** describing different injuries (e.g., minor burn, scraped knee, sprained ankle).
* For each case, use your guidebook to **identify the recommended first aid procedure**.
* Write down the matching treatment for each injury in your notebook or worksheet.

**Step 3: Analyze Pros and Cons**

* For each treatment you matched, think critically about:
  + **Pros:** What makes this treatment effective? How does it help the body heal?
  + **Cons:** Are there any risks or potential mistakes? What could happen if this treatment is done incorrectly?
* Discuss your answers with a partner or small group to deepen your understanding.

**Step 4: Simulate Proper First Aid Responses**

* Participate in a **role-playing or hands-on simulation** activity where you practice performing the correct first aid treatments on models or with classmates.
* Follow the step-by-step procedures you learned, making sure to use proper technique and safety measures.
* Reflect on the experience: What was easy or difficult? How did the treatment help?

## ACT-Style Question:

## What is the recommended **first** step when treating a minor burn?

## Apply ice directly to the burn

## Rinse with cool water for 10-15 minutes

## Pop any blisters that form

## Wrap tightly with dry gauze

## **⚡ Why These Activities and Questions Matter**

By engaging with ACT-aligned science activities using the First Aid Kit, students:

✅ Apply biological and medical concepts to real-life emergency scenarios.  
✅ Strengthen data analysis and experimental skills—core to ACT Science success.  
✅ Develop critical thinking by evaluating treatment effectiveness and predicting health outcomes.

These skills mirror the ACT Writing requirements—helping students become confident, effective communicators prepared for college and STEM careers.