

UNIT: FIRST AID

COOL IT DOWN!

GOAL:

Test different types of bandages to see which one works best when applied to a moist or sweaty wound. You'll test how well they stick, how strong they are, and how easy (or hard) they are to remove.

MATERIALS:

- ✓ Fabric bandage (like cloth adhesive)
- ✓ Plastic bandage (like standard Band-Aid)
- ✓ Gauze + tape
- ✓ Paper towel + tape (DIY bandage)
- ✓ Spray bottle with water (to simulate sweat or moisture)
- ✓ Paper "skin" or a damp sponge
- ✓ Timer (or stopwatch)
- ✓ Pencil for recording results

STUDENT DIRECTIONS:

Step 1: Prep your "skin":

- Lay your paper "skin" flat on the table (or use a moist sponge if instructed).

Step 2: Stick on your bandages:

- Apply each type of bandage to a separate spot on the "skin" or sponge. Make sure each one is pressed down firmly so it starts out sticking well.

Step 3: Spray the bandages:

- Use the spray bottle to lightly mist the bandages 3–4 times. This simulates moisture from sweat, rain, or a humid day.

Step 4: Start your timer:

- Wait **1 minute** without touching the bandages. Observe:
 - Did any start to peel off?
 - Which one stayed on best?

Step 5: Do the strength test:

- After 1 minute, gently tug each bandage. Try pulling from the corner.
 - Which one came off easily?
 - Which one held strong?

Step 6: Record your results in the table below. Discuss with your group what each material was good or not so good at.

Record It:

Bandage Type	Stayed on when wet?	Easy to remove?	Strong hold?
Fabric Bandage	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Plastic Bandage	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Gauze + Tape	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Paper Towel + Tape	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Think & Reflect:

1. Which bandage worked the best overall (held tight, stayed dry, felt comfortable)? Why?

2. If you had a real cut or scrape, which bandage would you choose and why?

3. What properties make a bandage useful in real life? (Think: water resistance, flexibility, comfort...)

STANDARDS ALIGNMENT

NGSS: 2-PS1-4 **STEL:** STEL 1A, STEL 4A, STEL 8A, STEL 11A **CCSS:** CCSS.MATH.CONTENT.2.MD.A.1, CCSS.MATH.CONTENT.2.MD.D.10, CCSS.MATH.PRACTICE.MP2, CCSS.MATH.PRACTICE.MP4, CCSS.MATH.PRACTICE.MP6