



#### TEACHER TALK TRACK:

##### Purpose

Introduce the learning experience and name the big ideas: skin, healing, and health-care careers.

##### Say

“Today we’re going to learn how skin protects the body, what can happen when skin is cut, and how people in health care help wounds heal.”

##### Ask

“When you hear the word ‘stitches’ or ‘suturing,’ what do you think of?” (Take 2–3 responses only.)

##### Do not overteach

Do not explain the whole lesson here. Avoid detailed stories about surgeries or medical emergencies.

# LEARNING GOALS

We are learning to

- explain how skin protects the body,
- describe how closing the wound can help healing begin, and
- name some careers that help people with wound care and healing.



TEACHER TALK TRACK:

Purpose

Make the three goals visible so students and teachers know what to focus on.

Say

“By the end of this experience, we want to be able to:

- explain how skin protects the body,
- describe how closing a wound can help healing begin, and
- name some careers that help people with wound care and healing.”

Ask

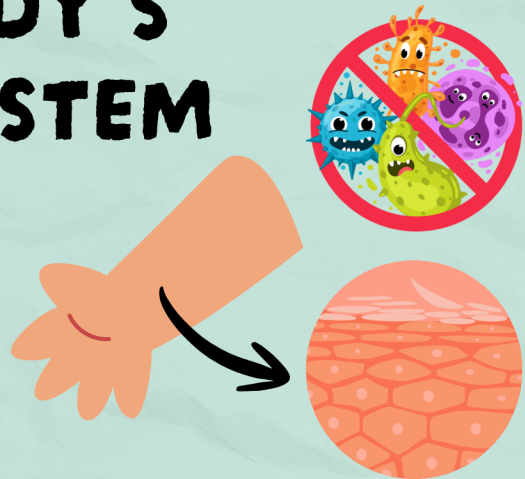
“Which of these goals are you most curious about right now?”

Do not overteach

Don't unpack each goal in detail yet. This is an anchor slide, not a mini-lesson.

# SKIN - YOUR BODY'S PROTECTION SYSTEM

- Skin covers the whole body.
- Skin helps protect what's inside you.
- Skin helps keep dirt and germs out.
- Skin is one of your body's first lines of defence.



Turn and talk: What are two ways your skin helps you every day?

## TEACHER TALK TRACK:

### Purpose

Situate students in their own bodies and highlight skin as a protection system.

### Say

“Skin covers your whole body. It helps protect what’s inside you and helps keep dirt and germs out. Skin is one of your body’s first lines of defence.”

### Ask

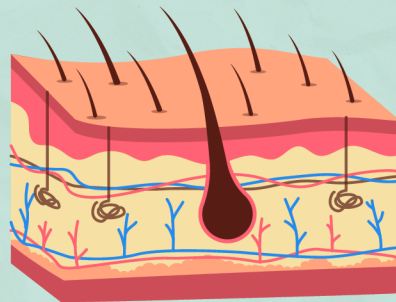
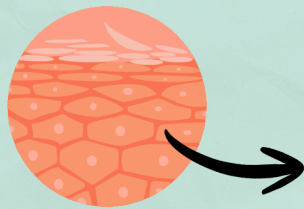
“Turn and talk: What are two ways your skin helps you every day?”

### Do not overteach

Avoid jumping into advanced vocabulary or other body systems. Stay with skin and everyday examples.

# A CLOSER LOOK

## Beneath the surface



### SKIN LAYERS

- Epidermis (top)
- Dermis (middle)
- Hypodermis (lower)

Embed the student-facing "Layers of the Skin" visual aid

### TEACHER TALK TRACK:

#### Purpose

Help students see skin as a protective system with layers, and introduce the words epidermis, dermis, and hypodermis in simple language.

#### Say

- "Your skin isn't just one flat piece. It has three main layers that work together to protect you."
- "The epidermis is the very top layer of skin you can see, like the outer paint on a wall."
- "The dermis is the middle layer where you find things like blood vessels, sweat glands, and hair roots."
- "The hypodermis is the bottom layer made mostly of fat, which helps cushion and insulate your body."

#### Ask

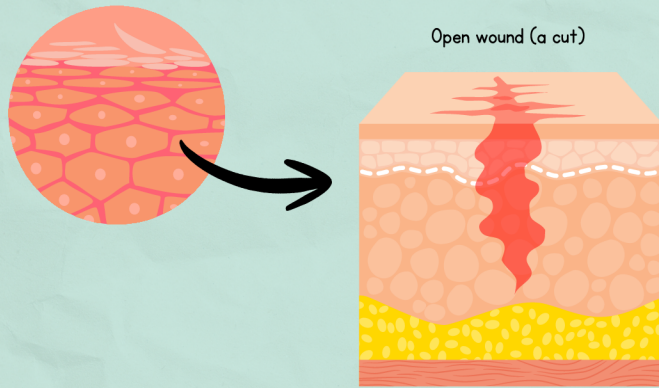
- "Why do you think it helps to have more than one layer of skin instead of just one?"
- "What might happen if a cut goes deep past the top layer and into the deeper layers?"

#### DO (Teacher Moves)

- Point to each layer on the visual as you name it, starting at the top and moving down.
- If you're using the blank skin layers page, invite students to fill in the labels after you model the names once.
- Emphasize that all three layers together are part of the integumentary system, a big word that

means the body parts (skin, hair, nails) that protect us.

# WHAT HAPPENS WHEN SKIN IS CUT?



A cut opens the skin.

The body loses some protection.

Germs can get in.

The body starts trying to heal.

## TEACHER TALK TRACK:

### Purpose

Connect the idea of a cut in the skin to the need for closing wounds, and introduce the words laceration and suture as helpful vocabulary, not scary medical terms.

### Say

- “When skin is opened by a cut, it loses some of its power to keep germs out.”
- “A laceration is a deep cut or tear in the skin that may need special care to heal properly.”
- “A suture is a special stitch that pulls the edges of a cut together so the skin can close and heal.”

### Ask

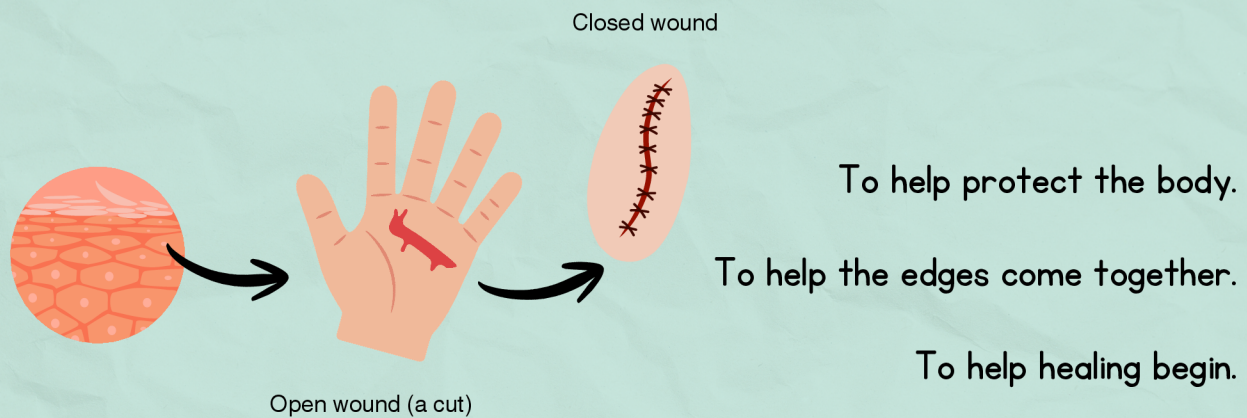
- “Why might it be important to bring the edges of a deep cut closer together instead of just leaving it open?”
- “How do you think pulling the edges together with sutures could help your body do its job?”

### DO (Teacher Moves)

- Use your hands or two pieces of paper to show an “open” gap, then gently push them closer together as you say the word suture.
- If it feels right for your class, mention that sometimes small cuts can heal fine with bandages alone, but deeper lacerations may need sutures from a health practitioner.



# WHY CLOSE SOME WOUNDS?



## TEACHER TALK TRACK:

### Purpose

Explain the “why” of wound closure to prepare for the suturing model.

### Say

“Sometimes people close a wound to help protect the body, to help the edges of the skin come together, and to help healing begin.”

“In this lesson, we’ll use a safe model to explore how stitches can help bring the sides of a wound together. We are not doing real medical care.”

### Ask

“Why do you think bringing the edges of the skin closer together could help the body heal?”

### Do not overteach

Do not teach suturing technique yet. This is about the purpose of closure, not the steps.

# WHO HELPS WITH WOUNDS



Embed the teacher-facing Health and Social Care careers showcase document.

## TEACHER TALK TRACK:

### Purpose

Help students see that different people support wound care and healing, and introduce “health practitioner” and “biomedical engineer” as inclusive, aspirational terms.

### Say

- “A health practitioner is someone who works in health care, like a nurse, doctor, dentist, or other professional who helps people stay healthy or heal when they are hurt.”
- “A biomedical engineer uses science and design to create tools and technologies, like medical devices or new materials, that help doctors and patients.”

### Ask

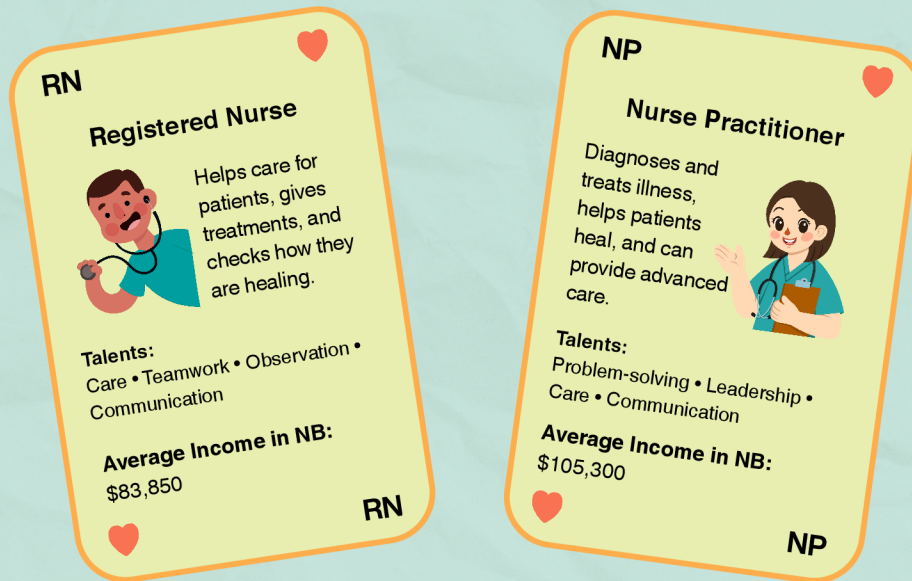
- “Which of these roles do you think might work most directly with stitches or wound care?”
- “Which roles might design the tools or bandages that help the skin heal?”

### DO (Teacher Moves)

- Point out that more than one kind of health-care worker may be involved when someone has a cut or wound—not just surgeons.
- Invite students to pick one role they’re curious about and share one talent that would be useful in that job (for example, careful hands, good communication, problem solving).



## Careers: Registered Nurse & Nurse Practitioner



### TEACHER TALK TRACK:

#### Purpose

Highlight two careers that may use suturing and create a numeracy on-ramp using salaries.

#### Say

“Here are two jobs that help with healing: Registered Nurse and Nurse Practitioner. A Registered Nurse provides direct care, education, and treatments. A Nurse Practitioner is a nurse with advanced training who can diagnose and treat illness and manage patient care.”

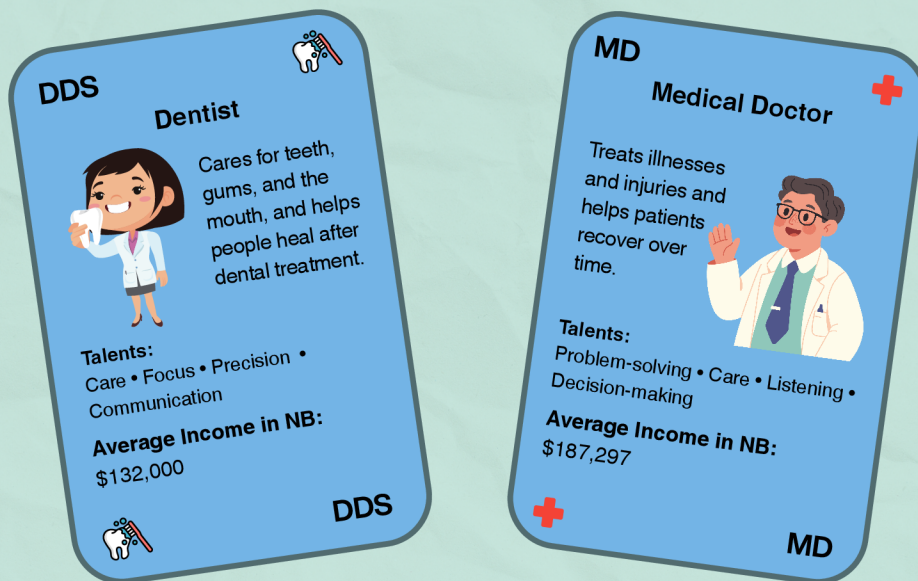
#### Ask (numeracy focus)

“Look at these average incomes: \$83,850 and \$105,300. Which number is larger? How can you tell?”

#### Do not over-teach

Don't turn this into a detailed career fair. Focus on: who they are, what they broadly do, and one simple number sense comparison. Save deeper career exploration for later or for extension.

## Careers: Dentist & Medical Doctor



### TEACHER TALK TRACK:

#### Purpose

Add two more roles and continue the numeracy connection.

#### Say

“Here are two more jobs that can be involved in wound care: Dentist and Medical Doctor. A Dentist cares for teeth, gums, and the mouth, and may use stitches after some procedures. A Family Doctor diagnoses and treats illnesses and injuries and helps patients get ongoing care.”

#### Ask (numeracy focus)

“Now look at these incomes: \$132,000 and \$187,297. Which is the largest of all four we’ve seen? How do you know?”

#### Do not overteach

Avoid value judgments about which job is ‘better’ because of income. Keep it as number sense and awareness, not as career ranking.

# More Ways Wounds Can Be Closed

## Grade 6+ Extension

These ideas are optional extra learning about newer technologies in wound care.

### TEACHER TALK TRACK:

#### Purpose

Clearly mark the start of optional modern wound-closure content for Grade 6+.

#### Say

“We’ve now covered our core Grade 5 learning about skin and wound closure. The next few slides are extra learning about newer technologies that help wounds heal. These are optional and can be used now or saved for later.”

#### Ask

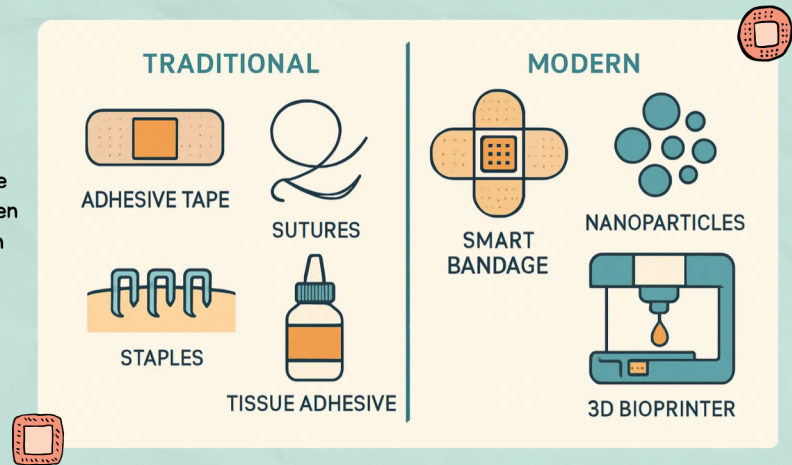
“Would you like to see some examples of newer ways scientists and health-care workers are working with wounds?”

#### Do not over-teach

Do not present this section as required content for every student. Make it clear that it is enrichment.

# Wound Closure Methods

Health care practitioners still use stitches, staples, and medical tape to close many cuts, especially when the wound is new and the skin can be brought together easily.



Grade 6+ Extension

## TEACHER TALK TRACK:

### Purpose

Show that there are both traditional and modern methods for wound closure, and that traditional methods remain important.

### Say

“Health-care workers have several ways to help close wounds. On the left are traditional methods like adhesive tape, sutures, staples, and tissue adhesive. On the right are newer ideas like smart bandages, nanoparticles, and 3D bioprinting.”

“Health-care practitioners still use stitches, staples, and medical tape to close many cuts, especially when the wound is new and the skin can be brought together easily.”

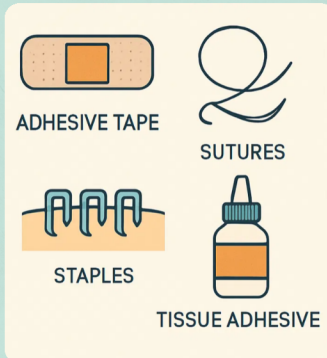
### Ask

“What do you notice about how the traditional methods and modern methods are similar or different?”

### Do not overteach

Don't explain each modern method in detail on this slide. Keep it as a 'big picture' comparison

# TRADITIONAL



Traditional methods such as adhesive tape, sutures, staples, and tissue adhesive remain common and are often used to help close cuts and protect the skin as it heals.

## TEACHER TALK TRACK:

### Purpose

Reinforce that traditional methods are still common ways to help skin heal.

### Say

“Traditional methods such as adhesive tape, sutures, staples, and tissue adhesive are still very common. They help close cuts and protect the skin as it heals.”

### Ask

“Have you ever had a bandage, a stitch, or a special glue on a cut? Which method did you experience?”

### Do not overteach

Avoid full procedural detail. Keep the focus on purpose: closing and protecting the wound.

## Adhesive Tape

Adhesive tape (AKA Band-aid) gently holds the skin together without needles and work best for small cuts where the skin is not being pulled apart.

## Tissue Adhesive

Tissue adhesives are special glues that close the skin without needles and are often used on small cuts, especially on the face.



### TEACHER TALK TRACK:

#### Purpose

Give student-friendly descriptions of adhesive tape and tissue adhesive.

#### Say

“Adhesive tape, like band-aids, gently holds the skin together without needles and works best for small cuts. Tissue adhesives are special glues that close the skin without needles, often used for small cuts, especially on the face.”

#### Ask

“Which of these methods do you think might feel most comfortable? Which might feel least comfortable? Why?”

#### Do not overteach

Don't include the duplicated text or clinical jargon. Keep language simple and centered on students' experiences.

## Sutures

Sutures are the most common way to close wounds and use thread to hold the skin together while it heals.

## Staples

Staples close the skin very quickly and are often used for long cuts, but they can sometimes be less comfortable during healing.



### TEACHER TALK TRACK:

#### Purpose

Emphasize sutures and staples as two key closure methods, without heavy clinical detail.

#### Say

“Sutures are one of the most common ways to close wounds. They use thread to hold the skin together while it heals. Staples can close wounds very quickly, especially long cuts, but they may feel a bit less comfortable during healing.”

#### Ask

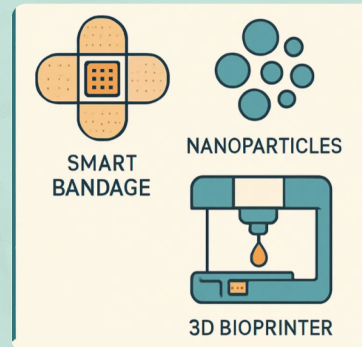
“Why might a doctor or nurse choose sutures instead of staples, or staples instead of sutures?”

#### Do not overteach

Remove or ignore the clinical paragraph about lacerations, imaging, diagnosis, and treatment at this grade level. It’s beyond the scope of this lesson.

# MODERN

Modern methods such as smart bandages, nanoparticles, and 3D bioprinters use advanced technology to support healing, reduce scarring, and help close wounds in new ways.



## TEACHER TALK TRACK:

### Purpose

Introduce high-level modern approaches as extension content.

### Say

“Modern methods such as smart bandages, nanoparticles, and 3D bioprinters use advanced technology to support healing, reduce scarring, and help close wounds in new ways.”

### Ask

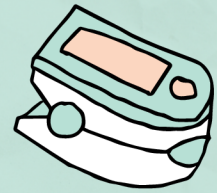
“What do you think a ‘smart bandage’ might be able to do that a regular bandage cannot?”

### Do not overteach

Don’t go into technical detail on how each technology works. Keep this about curiosity and awareness.

## 1. Smart Wound Dressing

Smart wound dressings are high-tech bandages that check how a wound is healing and send useful information.



## 2. Nanotherapeutics

Nanotherapeutics use very tiny particles in bandages or creams to help fight germs and speed up healing.



## 3. 3D Bio Printing

3D bioprinting creates new skin tissue to help repair large wounds where the body needs extra help to heal.



### TEACHER TALK TRACK:

#### Purpose

Give a simple, corrected explanation of each modern method as enrichment.

#### Say

- “Smart wound dressings are high-tech bandages that can help check how a wound is healing and sometimes send information to doctors or nurses.”
- “Nanotherapeutics use very tiny particles in bandages or creams to help fight germs and support healing.”
- “3D bioprinting is a technology that can help create skin-like tissue to repair large wounds when the body needs extra help to heal.”

#### Ask

“If you could design a new tool to help wounds heal, what features would you give it?”

#### Do not overteach

Do not present these as expectations for Grade 5 understanding. Treat them as ‘wow’ examples and curiosity sparks only.

# Teacher Appendix



## TEACHER TALK TRACK

Prepare students for the hands-on activity by introducing tension as “how tight or loose” the thread is, and linking it to their own stitches.

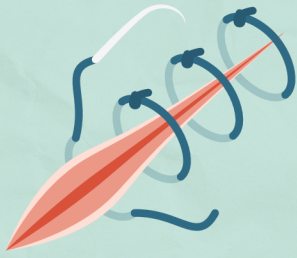
### SAY

- “Today we’re going to use paint, cardstock, hemp cord, and a blunt needle to model how sutures can help bring a wound together. This is an art-based simulation, not real medical care.”
- “We’ll also pay attention to tension. Tension is how tight or loose something is pulled; here it’s how much pull is on the thread and the paper ‘skin’.”

### ASK

- “What do you think could happen if the tension is too loose on a stitch?”
- “What might happen if the tension is too tight?”

# Figure 1 - Interrupted Suture



Interrupted Suture

An interrupted suture is made one stitch at a time. Each stitch is tied separately. This helps hold the two sides of the wound closer together

Everyday example



It is a bit like buttoning up a shirt: each button is its own "stitch" that helps bring the two sides together, one at a time.

## TEACHER TALK TRACK

### Purpose

Introduce the interrupted suture as one way to close a wound using separate stitches.

### Say

- "An interrupted suture is made one stitch at a time. Each stitch is tied separately, so each one can hold part of the wound closed."
- "In our model, we are using paint, cardstock, hemp cord, and a blunt needle to show how stitches can help bring the two sides of a wound closer together. This is an art-based simulation, not real medical care."

### Ask

"What do you notice about how each stitch is its own separate piece?"

### DO (Teacher Moves)

- Show Figure 2 – Interrupted Suture and Figure 3 – Square Knot as you model one stitch.
- Demonstrate one stitch that is too loose, one too tight, and one "just right," and ask students to vote which one they think will help the wound model close best.

# Figure 2 - Suture Spacing

Stitches work best when they are spaced in an even way.

Even spacing helps the wound close more neatly and helps the edges line up.

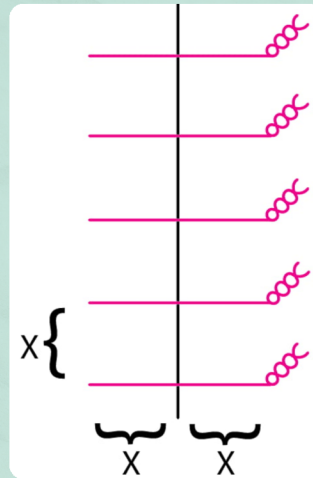


Image source: <https://www.merckmanuals.com/professional/multimedia/image/suture-spacing>

## TEACHER TALK TRACK

### Purpose

Help students notice that stitches are placed with spaces between them so the wound can be closed in an even way.

### Say

“When practitioners place stitches, they try to space them out in a careful and even way. That helps the two sides of the wound come together more neatly.”

“In our cardstock model, we use pre-scored holes to help us practise even spacing and to make the stitching process easier to follow.”

### Ask

“What do you notice when the stitches are spaced evenly instead of bunched together?”

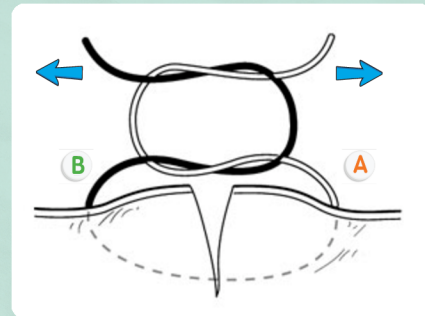
### Do not overteach

Do not turn this into a measurement lesson unless you want a small math extension. The main idea is simply that even spacing helps the wound model close more neatly.

# Figure 3 - Square Knot

A square knot helps keep a stitch in place.

The knot should feel secure, but not so tight that it pulls too hard on the wound model.



## TEACHER TALK TRACK

### Purpose

Show students the knot used to hold a stitch in place.

### Say

“A square knot is a simple knot that helps keep a stitch from coming undone. In our model, the knot helps hold the hemp cord in place after we bring the two sides of the wound closer together.”

“This knot is important because a stitch works best when it stays secure but is not pulled too tight.”

### Ask

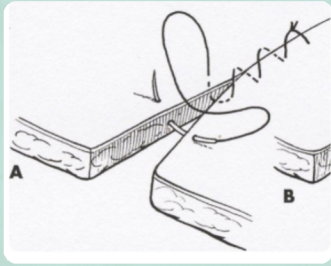
“What do you think might happen if the knot is too loose? What if it is too tight?”

### Do not overteach

Do not spend too long on perfect knot-tying language. At this stage, students only need to understand that the knot helps hold the stitch in place.

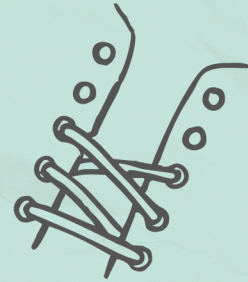
# Figure 4 - Continuous Suture

Continuous (aka running) Suture



A continuous suture uses one long piece of cord. Instead of tying a knot after every stitch, the cord keeps moving along the wound and is tied at the beginning and the end.

Everyday example



It is a bit like lacing a shoe or sewing along a line without stopping after every stitch.

## TEACHER TALK TRACK

### Purpose

Introduce the continuous suture as a second stitch pattern that uses one longer piece of cord.

### Say

“A continuous suture is made with one long piece of cord that keeps going along the wound. Instead of tying a knot after every stitch, you usually tie at the beginning and at the end.”

“In some ways, this can feel easier because you do not have to stop and tie a new knot every time.”

### Ask

“How is a continuous suture different from an interrupted suture?”

### Do not overteach

Do not expect students to master both techniques the same way. Use this figure to compare patterns, not to create a second full skill demand.