

Name: \_\_\_\_\_ Date Due: \_\_\_\_\_

# 8th Grade Language Arts



Assignment	Points Earned
Article Annotation	
Article Analysis	
Journals 27,28,29,30	
Book #5 – Reading Response	
BookBlog #5 due 10/22 (can be turned in 10/29)	FYI
GL 126-130 (ANTHROPOS - PAIS/PAIDOS)	FYI

Total=>

# High-tech sponge can save lives in less than 20 seconds

By **Allison Barrie**

Published February 04, 2016

What if a small sponge could mean the difference between life and death?

A plug for life-threatening situations, XSTAT technology can plug a gunshot wound within a mere 20 seconds.

Made by Oregon-based RevMedx, the tech was developed for the battlefield with funding from U.S. Special Operations Command and the U.S. Army Medical Research and Materiel Command's Combat Casualty Care Research Program.

The leading cause of death on the battlefield is uncontrolled external hemorrhage.

XSTAT helps solve this problem and has been used by the military for more than a year to treat wounds inflicted on the battlefield – but now the U.S. Food and Drug Administration has cleared the technology to be used to save lives on U.S. soil.

Quick control of severe bleeding is absolutely critical to saving lives and preventing shock, whether at home or in the war zone.

According to the United States Army Institute of Surgical Research, 30 to 40 percent of civilian deaths by severe injury are the result of hemorrhaging. Of those deaths, up to 56 percent of the patients bled out before reaching a hospital and the treatment they need.

Bullets, knives or shrapnel can cause penetrating wounds in junctional areas. Junctional wounds are areas where the legs and arms meet the torso, like the groin – not exactly tourniquet-friendly spots. XSTAT is designed to treat life-threatening junctional wounds that are notoriously tough to stop bleeding.

Think of the children's toy where you drop a capsule into bath water and the sponge rapidly expands, transforming into something cool like a dinosaur.

Say someone has a gunshot wound or is a stabbing victim ... first responders could immediately deploy XSTAT to buy the victim critical time to get to surgical response.

XSTAT is very easily applied. The delivery device looks like a fat 30 mm diameter syringe. Inside the transparent tube there are compressed sponges that look like pellets.

The syringe injects these tiny, highly absorbent, sponges. When the sponges make contact with blood or fluid inside a wound they expand to up to 10 times their original size. Rather than getting pushed out as they expand, the sponges continue to cling to the moisture.

By creating pressure, the sponges block bleeding. This creates a temporary barrier to blood flow and provides hemostatic pressure. Within 20 seconds or less, the sponges can stop hemorrhaging.

The tiny sponges are made from wood pulp – a plant-based material that won't dissolve into the body and are coated with absorbent and antimicrobial materials like chitosan. Chitosan promotes blood-clotting while being resistant to bacterial infection.

Each XSTAT syringe contains approximately 92 sponges. Depending on the wound's depth and size, a varying number of sponges will be necessary to achieve control of the bleeding. The sponges in each XSTAT applicator can absorb a pint of blood and up to three applicators can be used on one patient.

The sponges buy the gunshot victim up to four hours – providing time for the first responders to transport the patient to a hospital and then for the medical team to get him or her into surgery.

Once at hospital care, medical personnel can be certain all sponges have been removed because the sponges also contain markers that will show up on an X-ray.

Article Title: \_\_\_\_\_

Multiple horizontal lines for writing the article content.











## Reading Response Choice

**Directions:** As you read, put a sticky note next to any line, sentence, or section that jumps out at you. Write a brief note on your sticky note so that you can remember what you were thinking about that section. (If nothing jumps out at you by the time you have finished reading, go back and **FIND** something to respond to.)

When finished reading, write your Reading Response on the back of this paper.

### YOU MUST:

- Write **at least ten (10) complete sentences** in your Reading Response.
- Give the **page number, paragraph, or line number** of the part you are responding to.
- **Highlight** which Reading Response entry you are using from the list below.

### Types of Reading Response Entries

- 1. Interesting Intro or Clever Conclusion:**  
You think the author's introduction or conclusion interesting, clever, engaging, or effective. Tell what technique the author used and why it works so well.
- 2. Give an Opinion:**  
Tell what you think or feel about a certain part of the story, and why you think or feel that way. Be specific.
- 3. Ask a Question:**  
This can be a basic question about something you don't understand in the text, or a larger question (about life, literature, or anything) that the text made you consider. Explore possible answers to the question.
- 4. Make a Connection:**  
As you read, a certain point in the text reminds you of another story, poem, movie, song, or something from real life. How are the two alike?
- 5. Language Recognition:**  
You notice some appropriate sensory details, or figurative language such as a simile, onomatopoeia, or personification, and so on. What is the language, and how does it add to the story?
- 6. Significant Passage:**  
You realize a certain part in the text is important. Maybe you found the climax. Why do you think it's important? What does it mean? What does it tell you about the entire book? Explain **why** it is so important.
- 7. Find Foreshadowing:**  
You read something that seems like a hint of what will come later. Explain why you think this, and make a prediction.
- 8. Theme Recognition:**  
You find a sentence or two that might be the theme (the "So what?") of the piece. Explain it in your own words.
- 9. Spot the Setting:**  
You notice a part that refers to a particular place or time in the story. Why is it so important to the story?
- 10. Character Description:**  
You notice a detail about a character (what he or she looks like, thinks, says, or does). Why is it important? What does it reveal about that character?
- 11. Mark the Motivation:**  
You realize a character's motive(s) (what a character wants). Explain the motive(s) and its effect on the story or on other characters.
- 12. Detect the Conflict:**  
You realize one of the conflicts or problems in the story. Explain it, and explain how you recognized it.
- 13. Cite the Claim:**  
You find the sentence that is the author's main argument (the thesis or claim ... the most important quote in the story). Explain why you think it is the focus of the piece.

