



Literacy Design  
Collaborative

# Blood Disorders

★ TASK ★ LADDER

by Ashley J. Allen and Cory Duty

This module is a study of the blood and circulatory system with a focus on disorders of the blood and treatments of these disorders. Students will use content studied during the cardiovascular system unit and their readings from primary and secondary sources about blood disorders to write a medical informational pamphlet. The LDC Core Tools Life Stages of Health Care module by Patty Cole and Robin Smith was used as a guide to align the instructional mini-tasks with the teaching tasks of this module. The LDC Core Tools Cardiovascular System/Blood module by Holly Scott, Charlotte Davis, and Nicole Page was also used as a guide to create the design of this module.

GRADES

9 - 12

DISCIPLINE

 Science

COURSE

 Biology II  
Honors

PACING

 N/A

# Section 1: What Task?

## Teaching Task

### Task Template 12 - Informational or Explanatory

How does the body react when something is wrong with the blood? After reading Hole's Essentials of Anatomy and Physiology and selected circulatory system articles, write a medical informational pamphlet in which you define blood and explain three blood disorders including one genetic blood disorder and treatments. Support your discussion with evidence from the text(s). In your discussion, address the credibility and origin of sources in view of your research topic.

## Standards

### ***Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects***

#### CCR.R.1

Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

#### CCR.R.2

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

#### CCR.R.4

Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

#### CCR.R.6

Assess how point of view or purpose shapes the content and style of a text.

#### CCR.R.10

Read and comprehend complex literary and informational texts independently and proficiently.

#### CCR.W.2

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

#### CCR.W.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

#### CCR.W.5

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

## CCR.W.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

## CCR.W.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

## RST.11-12.5

Focus

Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

## WHST.11-12.2

Focus

Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

### *Louisiana Content Standards for Science*

## LS-H-F2

Identifying mechanisms involved in homeostasis;

## LS-H-F1

Identifying the structure and functions of organ systems;

## LS-H-G4

Focus

Exploring current research on the major diseases with regard to cause, symptoms, treatment, prevention, and cure;

## LS-H-G5

Researching technology used in prevention, diagnosis, and treatment of diseases/disorders.

## *Texts*

 Shier, David, Butler, Jackie and Lewis, Ricki.

Hole's Essentials Of Human Anatomy and Physiology (Tenth Edition). Boston: McGraw-Hill Higher Education. Chapter 12, pages 318-336.

 **"Myeloma" National Society of Hematology**

 **Blood Components**

 **"What is Hemophilia?" National Heart, Lung, Blood Institute.**

 **"Sickle-Cell Anemia." The New York Times**

 **"What are Thalassemias?" National Heart, Lung, Blood Institute**

 **Sample Brochure Templates**

## Student Work Rubric - Informational or Explanatory Task - Grades 9-12

	Emerging	Approaches Expectations	Meets Expectations	Advanced
	1	2	3	4
<b>Controlling Idea</b>	Presents a general or unclear controlling idea.	Presents a <b>clear</b> controlling idea <b>that addresses the prompt</b> , with an <b>uneven focus</b> .	Presents <b>and maintains a clear, specific</b> controlling idea that addresses <b>all aspects</b> of the prompt and <b>takes into account the complexity of the topic</b> .	Presents and maintains a <b>precise, substantive</b> controlling idea that addresses all aspects of the prompt, <b>takes into account the complexity of the topic</b> and, where appropriate, <b>acknowledges gaps in evidence or information</b> .
<b>Selection &amp; Citation of Evidence</b>	Includes minimal details from sources. Sources are used without citation.	Includes <b>details, examples, and/or quotations</b> from sources that are <b>relevant to the controlling idea</b> . <b>Inconsistently</b> cites sources.	Includes details, examples, and/or quotations from sources that <b>support the controlling and supporting ideas</b> . <b>Consistently</b> cites sources <b>with minor formatting errors</b> .	Includes <b>well-chosen</b> details, examples, and/or quotations from sources that <b>fully support</b> the controlling and supporting ideas. Consistently cites sources <b>using appropriate format</b> .
<b>Development / Explanation of Sources</b>	Explanation of ideas and source material is irrelevant, incomplete, or inaccurate.	Explains ideas and source material <b>to support the controlling idea</b> , with <b>some incomplete reasoning or explanations</b> .	<b>Accurately</b> explains ideas and source material and <b>how they support</b> the controlling idea.	<b>Thoroughly</b> and accurately explains ideas and source material <b>to support and develop</b> the controlling idea.
<b>Organization</b>	Lacks an evident structure. Makes unclear connections among ideas, concepts, and information.	<b>Groups ideas and uses transitions</b> to develop the controlling idea, with <b>some lapses in coherence or organization</b> .	<b>Groups and sequences</b> ideas to <b>develop a cohesive explanation</b> . Uses transitions to <b>clarify the relationships among complex ideas, concepts, and information</b> .	Groups and sequences ideas <b>in a logical progression in which ideas build to create a unified whole</b> . Uses <b>varied</b> transitions to clarify the <b>precise</b> relationships among complex ideas, concepts, and information.
<b>Conventions</b>	Major errors in standard English conventions interfere with the clarity of the writing. Language or tone is inappropriate.	Errors in standard English conventions <b>sometimes interfere</b> with the clarity of the writing. Uses language and tone that are <b>sometimes inappropriate</b> for the audience and purpose.	<b>Consistently applies</b> standard English conventions; <b>minor errors</b> , while noticeable, <b>do not interfere</b> with the clarity of the writing. Uses language and tone <b>appropriate to the audience and purpose</b> .	Consistently applies standard English conventions, <b>with few errors</b> . Demonstrates <b>varied syntax and precise word choice</b> . <b>Consistently</b> uses language and tone appropriate to the audience and purpose.
<b>Content Understanding (Generic)</b>	Attempts to include disciplinary content in explanation or argument but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate.	Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation.	Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding.	Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding.

## ***Background for Students***

Blood is a sign of life. Each day the heart pumps about 2,000 gallons of blood through the blood vessels. Blood is connective tissue composed of plasma, platelets, erythrocytes, and leukocytes. Circulating blood has three main functions including transportation, regulation, and protection. The circulatory system supplies the body with oxygen and nutrients and rids the body of waste products. When the blood cells are abnormal in shape or production, disorders occur. Students will use prior knowledge of types of blood as well as parts of blood.

## ***Extension***

Students will create a four-part pamphlet describing blood disorders. Students will define blood and its role in the circulatory system. Four blood disorders and treatments for each will be included in this four-part pamphlet.

## *Section 2: What Skills?*

### ***Preparing for the Task***

**BRIDGING CONVERSATION > TASK ENGAGEMENT:** Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.

**TASK AND RUBRIC ANALYSIS > TASK ANALYSIS:** Ability to understand and explain the task's prompt and rubric.

**PROJECT PLANNING:** Ability to plan so that the task is accomplished on time.

### ***Reading Process***

**PRE-READING > TEXT SELECTION:** Ability to identify appropriate texts.

**ACTIVE READING > ESSENTIAL VOCABULARY:** Ability to identify and master terms essential to understanding a text.

**POST-READING > GATHERING EVIDENCE:**

**POST-READING > ENHANCING COMPREHENSION:** Ability to identify the central point and main supporting elements of a text.

**POST-READING > ACADEMIC INTEGRITY:** Ability to use and credit sources appropriately.

### ***Transition to Writing***

**BRIDGING CONVERSATION > IDENTIFYING SIGNIFICANT ELEMENTS:** Ability to begin linking reading results to writing task.

### ***Writing Process***

**PLANNING > PLANNING THE WRITING:** Ability to develop a line of thought and text structure appropriate to an informational/explanatory task.

**DEVELOPMENT > INTRODUCTORY PARAGRAPH:** Ability to establish a controlling idea and consolidate information relevant to task.



**DEVELOPMENT > BODY PARAGRAPHS:** Ability to construct an initial draft with an emerging line of thought and structure.

**REVISION, EDITING, AND COMPLETION > REVISION:** Ability to refine text, including line of thought, language usage, and tone as appropriate to audience and purpose.

**REVISION, EDITING, AND COMPLETION > EDITING:** Ability to proofread and format a piece to make it more effective.



**REVISION, EDITING, AND COMPLETION > FINAL DRAFT:** Ability to submit final piece that meets expectations.

## Section 3: What Instruction?



PACING	SKILL AND DEFINITION	PRODUCT AND PROMPT	SCORING GUIDE	INSTRUCTIONAL STRATEGIES
<b>Preparing for the Task</b>				
10 mins	<b>BRIDGING CONVERSATION &gt; TASK ENGAGEMENT:</b> Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.	<b>SHORT RESPONSE WITH BULLETS</b> In a quick write, record your first reaction to the task prompt. Add some notes of things you know about blood, it's components, disorders.	Meets expectations by completed written ideas of blood, it's components, and disorders	<ul style="list-style-type: none"> <li>Link this task to earlier class content (types of blood, functions of blood).</li> <li>Discuss student responses.</li> <li>Clarify timetable and support plans for the task of preparing a medical brochure after studying blood, it's components, and disorders.</li> </ul>
Standards:  <b>WHST.11-12.4</b> : Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.  <b>WHST.11-12.2.B</b> : Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.  <b>WHST.11-12.1.B</b> : Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.  <b>WHST.11-12.1.C</b> : Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.  <b>WHST.11-12.1.A</b> : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.				
15 mins	<b>BRIDGING CONVERSATION &gt; TASK ENGAGEMENT:</b> Ability to connect the task and new content to existing knowledge, skills, experiences, interests, and concerns.	<b>QUICK LIST AND VIDEO</b> 1. Brainstorm different types of cells by creating an A-Z quick list of the components of blood. Construct a paragraph to explain why blood is important.  2. My Blood, Your Blood video  <a href="http://www.americasblood.org/about-blood/my-blood,-your-blood/videos.aspx">http://www.americasblood.org/about-blood/my-blood,-your-blood/videos.aspx</a>  View video and complete My Blood, Your Blood Video worksheet.	Completed A-Z list and paragraph is thorough.	Facilitate sharing of A-Z quick list.  Facilitate paragraph sharing.  Link blood to a healthy body.  Provide readings to establish timeline.  Provide worksheet.  Facilitate sharing answers to questions.
Standards:  <b>WHST.11-12.1.C</b> : Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.				
Additional Attachments:   <b>A - Z Quick list</b>  <b>My Blood Your Blood</b>				
10 mins	<b>TASK AND RUBRIC ANALYSIS &gt; TASK</b>	<b>BULLETS</b> In your own words, what are the	Meets expectations with	<ul style="list-style-type: none"> <li>Share examples of type of text students will produce (either from past students or</li> </ul>

	<p><b>ANALYSIS:</b> Ability to understand and explain the task's prompt and rubric.</p>	<p>important features of a good definition of blood, it's components, and disorders of the blood?</p>	<p>bullets paraphrasing blood, it's components, and disorders.</p>	<p>from professional writers).</p> <ul style="list-style-type: none"> <li>Identify or invite students to identify key features of sample brochures.</li> <li>Pair students to share and improve their individual bullets.</li> <li>Create a classroom list: Choose one student to share a few ideas on the board, and ask others to add to it.</li> </ul>
	<p>Standards:</p> <p><b>RST.11-12.3 :</b> Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</p> <p><b>RST.11-12.2 :</b> Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1 :</b> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>			
15 mins	<p><b>PROJECT PLANNING:</b> Ability to plan so that the task is accomplished on time.</p>	<p><b>GALLERY WALK</b> Students will work in groups to rewrite the seven components of the information rubric.</p>	<p>Meets expectations by paraphrasing scoring elements correctly.</p>	<p>Provide students with an informational rubric.</p> <p>Facilitate sharing of group scoring elements.</p> <p>Discuss the importance of planning.</p>
<b>Reading Process</b>				
20 mins	<p><b>PRE-READING &gt; TEXT SELECTION:</b> Ability to identify appropriate texts.</p>	<p><b>NOTES</b> For each text, list the needed bibliographic information. Add bullets on why you think the work is credible and/or worthy of study.</p>	<ul style="list-style-type: none"> <li>Identifies author, title, publisher, date, and any other needed information (for example, the volume for a periodical or the editor for an anthology).</li> <li>Includes reasonable evidence that work is credible and/or worthy of study.</li> </ul>	<ul style="list-style-type: none"> <li>Provide citation guide and discuss why each element of citation is needed.</li> <li>Ask students to brainstorm what makes an author credible and/or worthy of study.</li> <li>Create list of credible characteristics of author(s)</li> </ul>
	<p>Standards:</p> <p><b>WHST.11-12.8 :</b> Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and over-reliance on any one source and following a standard format for citation.</p> <p><b>WHST.11-12.4 :</b> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>			
15 mins	<p><b>ACTIVE READING &gt; ESSENTIAL VOCABULARY:</b> Ability to identify and master terms essential to</p>	<p><b>VOCABULARY LIST</b> In your notebook, list words and phrases essential to the texts. Add definitions, and (if appropriate) notes on connotation in this context.</p>	<ul style="list-style-type: none"> <li>Lists appropriate phrases.</li> <li>Provides accurate</li> </ul>	<ul style="list-style-type: none"> <li>After scoring, ask some students to share definitions of terms that others overlooked or misunderstood.</li> <li>After scoring, be willing to provide direct instruction or guide a close reading if</li> </ul>



	understanding a text.		definitions.	needed to work through a key phrase most students missed.
	<p>Standards:</p> <p><b>WHST.11-12.1.C</b> : Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>			
15 mins	<p><b>ACTIVE READING &gt; ESSENTIAL VOCABULARY</b>: Ability to identify and master terms essential to understanding a text.</p>	<p><b>KEY CONCEPT SYNTHESIS</b></p> <p>Use textual evidence from readings to create a focus on five blood disorders.</p>	Meets expectations with evidence of active reading.	<p>Provide Key Concept Synthesis worksheet.</p> <p>Facilitate sharing of responses to key concepts.</p>
	<p>Standards:</p> <p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p>Additional Attachments:</p> <p> <b>Key Concept Synthesis</b></p>			
10 mins	<p><b>ACTIVE READING &gt; ESSENTIAL VOCABULARY</b>: Ability to identify and master terms essential to understanding a text.</p>	<p><b>FRAYER MODEL</b></p> <p>Write your definition of the word <b>blood</b>, components, disorders, and a draw a picture of blood.</p>	Meets expectations with correct definition, components, disorders, and a picture of blood.	<p>Provide Frayer model worksheet.</p> <p>Facilitate sharing of definitions, characteristics, disorders, and picture of blood.</p>
	<p>Standards:</p> <p><b>WHST.11-12.1</b> : Write arguments focused on discipline-specific content.</p> <p>Additional Attachments:</p> <p> <b>Frayer Model</b></p>			
10 mins	<p><b>ACTIVE READING &gt; ESSENTIAL VOCABULARY</b>: Ability to identify and master terms essential to understanding a text.</p>	<p><b>SNOWBALL</b></p> <p>Write a component of blood on a sheet of paper. Ball paper up and throw gently to another student. Write the definition of the term you receive. Ball paper up and throw gently to another student. Read definitions, make necessary corrections, and present to class.</p>	Meets expectations with correct definitions of components of blood.	Facilitate sharing of vocabulary.
	Standards:			

	<p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>			
15 mins	<p><b>POST-READING &gt; GATHERING EVIDENCE:</b></p>	<p><b>NOTES</b></p> <p>From each text, make a list of the elements that look most important for answering the prompt. Do what you need to do to avoid plagiarism.</p>	<ul style="list-style-type: none"> <li>Identifies relevant elements.</li> <li>Includes information to support accurate citation (for example, page numbers for a long text, clear indication when quoting directly).</li> </ul>	<ul style="list-style-type: none"> <li>Teach a sample format for note taking.</li> <li>Check that early student work is in the assigned format (or in another format that gathers the needed information effectively).</li> </ul>
	<p>Standards:</p> <p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>			
20 mins	<p><b>POST-READING &gt; ENHANCING COMPREHENSION:</b></p> <p>Ability to identify the central point and main supporting elements of a text.</p>	<p><b>SHORT REFLECTIVE ENTRY FOR EACH TEXT</b></p> <p>What is the author of the article trying to accomplish? Which parts of the text show you that?</p>	<ul style="list-style-type: none"> <li>Answers questions with credible response.</li> </ul>	<ul style="list-style-type: none"> <li>Invite students to brainstorm the author's intent with list or highlighting.</li> <li>Invite students to share and discuss their answers for each text.</li> <li>After the discussion, allow them to add to their entries.</li> </ul>
	<p>Standards:</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p> <p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p>			
20 mins	<p><b>POST-READING &gt; ENHANCING COMPREHENSION:</b></p> <p>Ability to identify the central point and main supporting elements of a text.</p>	<p><b>COMPARISON MATRIX</b></p> <p>Complete Comparison Matrix to compare and contrast symptoms of disorders and treatments.</p>	<p>Meets expectations with completed comparison matrix.</p>	<p>Provide Comparison Matrix worksheet.</p> <p>Facilitate sharing of comparisons.</p>
	<p>Standards:</p> <p><b>RST.11-12.6</b> : Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.</p> <p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>			

Additional Attachments:				
 <b>Comparison Matrix</b>				
20 mins	<b>POST-READING &gt; ENHANCING COMPREHENSION:</b> Ability to identify the central point and main supporting elements of a text.	<b>TPEQEA</b> Complete TPEQEA to write clear, concise paragraphs that include one topic sentence, one point, three sentences with examples, three sentences with quotes, five sentences with elaboration, and five sentences with analysis.	Meets expectations by completing TPEQEA relevant to topic and explanation.	Provide TPEQEA writing format sheet.
Standards:  <b>WHST.11-12.2.A</b> : Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. <b>WHST.11-12.1.E</b> : Provide a concluding statement or section that follows from or supports the argument presented. <b>WHST.11-12.1.B</b> : Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. <b>WHST.11-12.1.C</b> : Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. <b>WHST.11-12.1.A</b> : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence. <b>WHST.11-12.1</b> : Write arguments focused on discipline-specific content.				
Additional Attachments:				
 <b>TPEQEA</b>				
15 mins	<b>POST-READING &gt; ACADEMIC INTEGRITY:</b> Ability to use and credit sources appropriately.	<b>DEFINITION AND STRATEGIES</b> Define "plagiarism" and list ways to avoid it.	<ul style="list-style-type: none"> <li>Provides accurate definition.</li> <li>Lists several appropriate strategies.</li> </ul>	<ul style="list-style-type: none"> <li>Discuss respect for others' work to assemble evidence and create texts.</li> <li>Discuss academic penalties for stealing others thoughts and words.</li> </ul>
Standards:  <b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. <b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.				
10 mins	<b>POST-READING &gt; ACADEMIC INTEGRITY:</b> Ability to use and credit sources appropriately.	<b>EVALUATING EVIDENCE</b> Read closely for evidence to demonstrate ability to identify disorders, symptoms, and treatments citing sources.	Meets expectations with evidence of citations.	Provide Evaluating Evidence worksheet.  Facilitate sharing of responses of Evaluating Evidence.
Standards:  <b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the				

author makes and to any gaps or inconsistencies in the account.

Additional Attachments:

 **Evaluating Evidence**

### Transition to Writing

15 mins

**BRIDGING CONVERSATION > IDENTIFYING SIGNIFICANT ELEMENTS:** Ability to begin linking reading results to writing task.

#### BULLETS

In a quick write, note what you know now that you have read about blood, it's disorders and treatments of disorders.

*Bullets with information on blood, disorders, and treatments.*

- Socratic seminar discussion-based strategy.
- Small group discussion using questions.

Standards:

**WHST.11-12.1** : Write arguments focused on discipline-specific content.

**WHST.11-12.1.A** : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

15 mins

**BRIDGING CONVERSATION > IDENTIFYING SIGNIFICANT ELEMENTS:** Ability to begin linking reading results to writing task.

#### BRAINSTORM, GROUP, LABEL

List disorder, associative terms, and treatments of blood disorders.

Meets expectations with completed lists of disorders, terms, and treatments.

Provide Brainstorm, Group, Label worksheet.  
Facilitate sharing disorders and associations.

Standards:

**WHST.11-12.1.A** : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

**WHST.11-12.1** : Write arguments focused on discipline-specific content.

Additional Attachments:

 **Brainstorm, Group, Label**

### Writing Process

15 mins

**PLANNING > PLANNING THE WRITING:** Ability to develop a line of thought and text structure appropriate to an informational/explanatory task.

#### OUTLINE

Create an outline based on your notes and reading in which you state your controlling idea, sequence your points, and note your supporting evidence.


- Creates an outline.
- Supports controlling idea.
- Uses evidence from texts read earlier.

- Allow students to work in groups to generate ideas for the layout of the blood disorders pamphlet.
- Support for Struggling Students: Work together as a class to generate a layout that the students may use

Standards:

**RST.11-12.5** : Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.

**RST.11-12.2** : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

15 mins	<p><b>PLANNING &gt; PLANNING THE WRITING:</b> Ability to develop a line of thought and text structure appropriate to an informational/explanatory task.</p>	<p><b>SORT AND SELECT</b> Create a list of ideas important to the understanding of the reading and sort into smaller groups. Title each group and tell why each group was created.</p>	<p>Meets expectations by creating lists of ideas from each article and thorough explanations.</p>	<p>Provide Sort and Select worksheet.  Facilitate sharing of ideas.</p>
<p>Standards:</p> <p><b>WHST.11-12.1.C</b> : Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p><b>WHST.11-12.1</b> : Write arguments focused on discipline-specific content.</p> <p><b>WHST.11-12.1.A</b> : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p>Additional Attachments:</p> <p> <b>Sort and Select</b></p>				
10 mins	<p><b>DEVELOPMENT &gt; INTRODUCTORY PARAGRAPH:</b> Ability to establish a controlling idea and consolidate information relevant to task.</p>	<p><b>OPENING PARAGRAPH</b> Write an opening paragraph to clearly define blood that includes a hook and background information on blood and disorders.</p>	<ul style="list-style-type: none"> <li>Writes a concise summary statement or draft opening.</li> <li>Provides direct answer to main prompt requirements.</li> <li>Establishes a controlling idea.</li> <li>Identifies key points that support development of the controlling idea.</li> </ul>	<ul style="list-style-type: none"> <li>Offer several examples of opening paragraphs.</li> <li>Ask class to discuss what makes them strong or weak.</li> <li>Review the list that students created earlier to identify needed elements (from Cluster 1, skill 2).</li> </ul>
<p>Standards:</p> <p><b>WHST.11-12.2.A</b> : Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p><b>WHST.11-12.2</b> : Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.</p> <p><b>WHST.11-12.1.A</b> : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p>				
40 mins	<p><b>DEVELOPMENT &gt; BODY PARAGRAPHS:</b> Ability to construct an initial draft with an emerging line of thought and structure.</p>	<p><b>INITIAL DRAFT</b> Write an initial draft complete with opening, development, and closing; insert and cite textual evidence. Draft should include four body columns that address all aspects of the prompt and demonstrate effective use of reading material and mini-tasks used throughout the</p>	<ul style="list-style-type: none"> <li>Provides complete draft with all parts.</li> <li>Supports the opening in the later sections with evidence and citations.</li> <li>Completed</li> </ul>	<ul style="list-style-type: none"> <li>Encourage students to re-read prompt partway through writing, to check that they are on track.</li> </ul>

		module.	draft written in readable prose.	
	<p>Standards:</p> <p><b>RST.11-12.9</b> : Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</p> <p><b>RST.11-12.6</b> : Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.</p> <p><b>RST.11-12.4</b> : Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11—12 texts and topics.</p> <p><b>RST.11-12.2</b> : Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</p> <p><b>RST.11-12.1</b> : Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.</p>			
1 hr	<p><b>REVISION, EDITING, AND COMPLETION &gt; REVISION:</b> Ability to refine text, including line of thought, language usage, and tone as appropriate to audience and purpose.</p>	<p><b>MULTIPLE DRAFTS</b></p> <p>Refine composition's analysis, logic, and organization of ideas/points. Use textual evidence carefully, with accurate citations. Decide what to include and what not to include.</p>	<ul style="list-style-type: none"> <li>Provides complete draft with all parts.</li> <li>Supports the opening in the later sections with evidence and citations.</li> <li>Improves earlier edition.</li> </ul>	<ul style="list-style-type: none"> <li>Model useful feedback that balances support for strengths and clarity about weaknesses.</li> <li>Assign students to provide each other with feedback on those issues.</li> </ul>
	<p>Standards:</p> <p><b>WHST.11-12.10</b> : Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.</p> <p><b>WHST.11-12.6</b> : Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</p> <p><b>WHST.11-12.5</b> : Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p> <p><b>WHST.11-12.4</b> : Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p> <p><b>WHST.11-12.2.E</b> : Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic).</p> <p><b>WHST.11-12.2.D</b> : Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p><b>WHST.11-12.2.C</b> : Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p><b>WHST.11-12.2.B</b> : Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.</p> <p><b>WHST.11-12.2.A</b> : Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p><b>WHST.11-12.2</b> : Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.</p> <p><b>WHST.11-12.1.E</b> : Provide a concluding statement or section that follows from or supports the argument presented.</p> <p><b>WHST.11-12.1.D</b> : Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</p> <p><b>WHST.11-12.1.B</b> : Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each</p>			









	<p>while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.</p> <p><b>WHST.11-12.1.A</b> : Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.</p> <p><b>WHST.11-12.1</b> : Write arguments focused on discipline-specific content.</p>			
40 mins	<p><b>REVISION, EDITING, AND COMPLETION &gt; EDITING</b>: Ability to proofread and format a piece to make it more effective.</p>	<p><b>CORRECT DRAFT</b></p> <p>Revise draft to have sound spelling, capitalization, punctuation, and grammar. Adjust formatting as needed to provide clear, appealing text.</p>	<ul style="list-style-type: none"> <li>Provides draft free from distracting surface errors.</li> <li>Uses format that supports purpose.</li> </ul>	<ul style="list-style-type: none"> <li>Briefly review selected skills that many students need to improve.</li> <li>Teach a short list of proofreading marks.</li> <li>Assign students to proofread each other's texts a second time.</li> </ul>
	<p>Standards:</p> <p><b>WHST.11-12.6</b> : Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</p> <p><b>WHST.11-12.5</b> : Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p> <p><b>WHST.11-12.4</b> : Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p> <p><b>WHST.11-12.2.D</b> : Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.</p> <p><b>WHST.11-12.2.C</b> : Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>			
10 mins	<p><b>REVISION, EDITING, AND COMPLETION &gt; FINAL DRAFT</b>: Ability to submit final piece that meets expectations.</p>	<p><b>FINAL PIECE</b></p> <p>Turn in your complete set of drafts, plus the final version of your piece.</p>	<ul style="list-style-type: none"> <li>Fits the "Meets Expectations" category in the rubric for the teaching task.</li> </ul>	None
	<p>Standards:</p> <p><b>WHST.11-12.6</b> : Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</p> <p><b>WHST.11-12.5</b> : Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p> <p><b>WHST.11-12.4</b> : Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>			

## Instructional Resources

### Teacher Resource

 **My Blood, Your Blood Video**

### Student Handout

-  **A-Z Quicklist**
-  **Key Concept Synthesis**
-  **Comparison Matrix**
-  **Fraye Model**
-  **Evaluating Evidence**
-  **Select and Sort**
-  **Brainstorm, Group, Label**
-  **TPEQEA**



## *Section 4: What Results?*

### ***Student Work Samples***

#### ***Advanced***

 **Blood Pamphlet**

 **Blood Pamphlet**

 **Blood Pamphlet**

#### ***Meets Expectations***

 **Blood Pamphlet**

### ***Teacher Reflection***

Not provided

## ***All Attachments***

🔗 "Myeloma" National Society of Hematology : <https://s ldc.org/u/21iqr55lc3r9qdydzoa4bjknw>

🔗 Blood Components : <https://s ldc.org/u/79zra6j4q3sklw6m5lj7n5ddn>

🔗 "What is Hemophilia?" National Heart, Lung, Blood Institute. :  
<https://s ldc.org/u/7s096kbe4i4w8pnnncr09q8j3i>

🔗 "Sickle-Cell Anemia." The New York Times : <https://s ldc.org/u/bd0ytx3vqn3ylwn1u07uhvj6>

🔗 "What are Thalassemias?" National Heart, Lung, Blood Institute :  
<https://s ldc.org/u/7v2xk9qbcyds708440ue3wa>

🔗 Sample Brochure Templates : <https://s ldc.org/u/edfal1vso2n42ldxfkzegwaub>

📄 Blood Pamphlet : <https://s ldc.org/u/8aok95g21vh0mnpd60dcp6r7>

📄 Blood Pamphlet : <https://s ldc.org/u/9dp4f72qsxaupah65bxhzuwx7>

📄 Blood Pamphlet : <https://s ldc.org/u/2mldhnu39brj7an6lw27kl4pl>

📄 Blood Pamphlet : <https://s ldc.org/u/2vok00xjfdxjvr20nqq1jwcgw>

🔗 My Blood, Your Blood Video : <https://s ldc.org/u/36hsq58sqmj3o6mi2q10xqzam>

📄 A-Z Quicklist : <https://s ldc.org/u/467jnbikgej6xvlbr35bgqm1b>

📄 Key Concept Synthesis : <https://s ldc.org/u/3qrrn3lwaequbjxegdh6r81k0>

📄 Comparison Matrix : <https://s ldc.org/u/d9i8vwrofkji52hptj7hbsz45>

📄 Frayer Model : <https://s ldc.org/u/65o06vyeskughwo1wje5q5md5>

📄 Evaluating Evidence : <https://s ldc.org/u/2x6f0ui5m6mstdn949h4wswo>

📄 Select and Sort : <https://s ldc.org/u/7vpau98o60q7dwzoyp0jikfl>

📄 Brainstorm, Group, Label : <https://s ldc.org/u/8iy44aerv7xcrx840s1wfw7b0>

📄 TPEQEA : <https://s ldc.org/u/43vqtdtq8htqyuqc8n0xudyk4>