



Literacy

GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY

UNIT OVERVIEW

The Forensic Anthropology task is embedded in a 4-week curricular unit on informational texts in which students read four informational texts on the subject of forensic anthropology. The students complete three assessments tasks that build in complexity and are sequenced to scaffold student learning.

TASK DETAILS

Task Name: Forensic Anthropology

Grade: 8

Subject: Literacy

Task Description: This task asks students to write an informative/explanatory essay, demonstrating knowledge they have gained about the science of forensic anthropology. Student must be able to determine the central idea of a text and analyze its development through the course of multiple texts and differentiate between relevant and irrelevant information.

Standards:

RI.8.1 Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.

RI.8.10 By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.

W.8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

L.8.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

L.8.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Materials Needed:

- “What is Forensic Anthropology by R.U. Steinberg
- “Dead Men Talking: Solving Crime Through Science” by David Kohn
- “Identifying the Victim” by Angela Libal
- “Giving Faces to the Lost” by Angela Libal



TABLE OF CONTENTS

The task and instructional supports in the following pages are designed to help educators understand and implement tasks that are embedded in Common Core-aligned curricula. While the focus for the 2011-2012 Instructional Expectations is on engaging students in Common Core-aligned culminating tasks, it is imperative that the tasks are embedded in units of study that are also aligned to the new standards. Rather than asking teachers to introduce a task into the semester without context, this work is intended to encourage analysis of student and teacher work to understand what alignment looks like. We have learned through the 2010-2011 Common Core pilots that beginning with rigorous assessments drives significant shifts in curriculum and pedagogy. Universal Design for Learning (UDL) support is included to ensure multiple entry points for all learners, including students with disabilities and English language learners.

PERFORMANCE TASK: FORENSIC ANTHROPOLOGY	3
UNIVERSAL DESIGN FOR LEARNING PRINCIPLES	8
RUBRIC	10
ANNOTATED STUDENT WORK	16
INSTRUCTIONAL SUPPORTS	26
UNIT OUTLINE	27
ASSESSMENT TASK 1	34
ASSESSMENT TASK 1 RUBRIC	38
ASSESSMENT TASK 2	41
ASSESSMENT TASK 2 RUBRIC	45
TEXTS	48
SUPPORTS FOR ENGLISH LANGUAGE LEARNERS	72
SUPPORTS FOR STUDENTS WITH DISABILITIES	79

Acknowledgements: The unit was developed by David Graeber (CFN 534), Brooke Barr (CFN 532), Jennifer Brandes (06M223), and Kristen Emmanuel (06M223) with input from the Curriculum Designers Alignment Review Team. The tasks were developed by the 2010-2011 NYC DOE Middle School Performance Based Assessment Pilot Design Studio Writers.



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY PERFORMANCE TASK

Assessment Task 3

You are a forensic anthropologist. You are taking your dog for a walk, and he breaks free and sprints down the block. When you catch up with him, you find him digging in the dirt. Your dog pulls out what looks like a bone. Upon further investigation, you realize your dog has discovered the remains of a human body. As a forensic anthropologist, you must identify the body. What steps will you take and with whom will you consult?

Write an informative/explanatory essay in which you explain the steps you will take and the people you will consult. In your text, be sure to:

- Explain at least three steps you will take (after calling the police to report the body) and write reasons for these steps. In other words, explain: why will you take these steps and why take them in this order?
- Explain who you will consult and write your reasons for consulting these people.

Use textual evidence from two of the four texts. The texts you should use are ones we've read previously. They include:

- "What is Forensic Anthropology?" by R.U. Steinberg
- "Dead Men Talking: Solving Crime Through Science" by David Kohn
- "Identifying the Victim" by Angela Libal
- "Giving Faces to the Lost" by Angel Libal

Your informative/explanatory essay should be one to two pages in length and should be written for an audience that is knowledgeable about forensic anthropology. Be sure to use words and phrases (i.e., transitions) that clarify relationships among steps and ideas and to include information and vocabulary that a forensic anthropologist would use in an explanation. Your informative/explanatory essay should follow the conventions of standard English, including capitalization, punctuation, and spelling.

Answer the questions below to plan your writing. Your answers will be collected but not graded. Compose your informative/explanatory essay on the following pages. After you've written your text, answer the StepBack questions. Your responses to the StepBack questions will also be collected but not graded.

Prepare to Write:

1. What do you have to read and write to complete this task? In other words, what is this task asking you to do?
2. What are the components or parts of the task?
3. What will you do first, second, third, etc.?

Space for Notes:

[illegible]

StepBack Questions: Please answer the following questions in the space below. Your responses will be collected but not graded.

Ø What did you do to complete the assessment task? List the steps that you took to complete the task.

Ø What did you find easy about the assessment task?

Ø What did you find difficult about the assessment task?



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY UNIVERSAL DESIGN FOR LEARNING (UDL) PRINCIPLES

Forensics – ELA 8th Grade
**Common Core Learning Standards/
Universal Design for Learning**

The goal of using Common Core Learning Standards (CCLS) is to provide the highest academic standards to all of our students. Universal Design for Learning (UDL) is a set of principles that provides teachers with a structure to develop their instruction to meet the needs of a diversity of learners. UDL is a research-based framework that suggests each student learns in a unique manner. A one-size-fits-all approach is not effective to meet the diverse range of learners in our schools. By creating options for how instruction is presented, how students express their ideas, and how teachers can engage students in their learning, instruction can be customized and adjusted to meet individual student needs. In this manner, we can support our students to succeed in the CCLS.

Below are some ideas of how this Common Core Task is aligned with the three principles of UDL; providing options in representation, action/expression, and engagement. As UDL calls for multiple options, the possible list is endless. Please use this as a starting point. Think about your own group of students and assess whether these are options you can use.

REPRESENTATION: *The “what” of learning.* How does the task present information and content in different ways? How do students gather facts and categorize what they see, hear, and read? How are they identifying letters, words, or an author's style?

In this task, teachers can...

- ✓ **Embed support for unfamiliar references within the text (e.g., idioms, academic language, and figurative language)** by using photographs, videos, and images to illustrate the range of scientific language surrounding forensic anthropology.

ACTION/EXPRESSION: *The “how” of learning.* How does the task differentiate the ways that students can express what they know? How do they plan and perform tasks? How do students organize and express their ideas?

In this task, teachers can...

- ✓ **Provide graphic organizers and templates for data collection and organizing information** by providing project checklists that will later be used in the informative/explanatory essays.

ENGAGEMENT: *The “why” of learning.* How does the task stimulate interest and motivation for learning? How do students get engaged? How are they challenged, excited, or interested?

In this task, teachers can...

- ✓ **Engage learners in assessment discussions of what constitutes excellence and generate relevant examples** through the use of print or audio-visual learner diaries to foster authentic communication between teacher and student.

Visit <http://schools.nyc.gov/Academics/CommonCoreLibrary/default.htm> to learn more information about UDL.



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY RUBRIC

The Forensic Anthropology task was scored using a primary trait rubric and a secondary trait rubric.

Primary trait rubrics focus attention on rating of a single trait considered to be the most essential for demonstrating success regarding a particular product or performance. They can be used most effectively by teachers with the ELA model of assessment tasks for several reasons. First, by isolating one component of written discourse to assess, primary trait scoring allows raters or teachers to focus sharply on that component without being distracted by many other possibilities. The component that is chosen for assessment is not just any component but one that is essential to success on a particular assessment task. The study of the work is focused on the heart of the task. If students are weak on the heart of the task, teachers have sufficient data to plan lessons for re-teaching and/or modification of lessons. Also, because the scoring guide uses language from the task and CCSS to define its score levels, it allows for greater alignment between the task assigned and the trait or dimension being assessed. At the very least, anyone who looks at the scoring guide rubric should expect to see such a connection. For its specificity and clarity alone, primary trait rubrics offer important advantages over other means of scoring.

Secondary trait rubrics identify assessed skills and content from the task that have not been identified in the primary trait rubric. They accompany primary trait rubrics and are used after primary trait rubrics.

Grade 8 Literacy: Forensic Anthropology Primary and Secondary Trait Scoring Guides

Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts.

Scoring Guide

4	Informative/explanatory text that uses evidence from at least two texts to explain the steps and the consultants' roles with reasons for each step and each consultant. The explanation includes at least three steps that are logically sequenced and concisely explained with reasons for the steps and the order in which they are taken. The explanations of the consultants' roles in identifying the victim are clear and justified.
3	Informative/explanatory text that uses evidence from at least two texts to explain the steps and the consultants' roles with reasons for each step and consultant. The explanation includes a list of at least three steps with general or incomplete reasons provided for the steps. General or incomplete explanations of the consultants' roles in identifying the victim are included.
2	Informative/explanatory text is only partially complete or has inaccuracies. For example, textual evidence from two texts is used, and three written steps and consultants' roles may be included. However, written reasons, if included, for steps and/or consultants have inaccuracies.
1	Paper is more a summary than an explanation. It includes few ideas, examples, or roles drawn from the two texts related to the prompt that demonstrate an accurate understanding of the steps or consultants specific to this investigation.

Grade 8 Literacy: Forensic Anthropology Primary and Secondary Trait Scoring Guides

Secondary Trait #1 of Assessment Task 3: Explanatory text includes domain-specific vocabulary and connecting words and phrases (i.e., transitions) to clarify relationship among ideas.

Scoring Guide

4	Explanatory text includes accurate and fully integrated domain-specific vocabulary. The transitions are appropriate to the content and help to clarify relationship among ideas.
3	Explanatory text includes accurate domain-specific vocabulary, but fewer instances than necessary given prompt's requirements to communicate as a forensic anthropologist to a knowledgeable audience. The transitions are limited but appropriate.
2	Explanatory text has limited use of domain-specific vocabulary, or it is used inappropriately. Transitions are limited or used inappropriately.
1	The paper has zero or one example of domain-specific vocabulary or most uses are inaccurate. There are no transitions that help to clarify relationships among ideas.

Grade 8 Literacy: Forensic Anthropology Primary and Secondary Trait Scoring Guides

Secondary Trait #2 of Assessment Task 3: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing.

Scoring Guide

4	Consistently uses standard English and standard capitalization, punctuation, and spelling.
3	Generally uses standard English and standard capitalization, punctuation, and spelling.
2	Only sometimes uses standard English and standard capitalization, punctuation, and spelling.
1	Little evidence of use of standard English and standard capitalization, punctuation, and spelling.

Grade 8 Literacy: Forensic Anthropology Primary and Secondary Trait Scoring Guides

Explicit Statements about What Will Be Expected as Evidence of a Score Point 4

Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts.

Score Point 4

Informative/explanatory text that uses evidence from at least two texts to explain the steps and the consultants' roles with reasons for each step and each consultant. The explanation includes at least three steps that are logically sequenced and concisely explained with reasons for the steps and the order in which they are taken. The explanations of the consultants' roles in identifying the victim are clear and justified.

Example of Textual Evidence

Explanations of steps with reasons:

- Once I knew the bones were human, a first step of identification was sorting and preparing the decedent's bones to prepare to identify a biological profile. Libal, in her chapter, "Identifying the Victim," claims that forensic anthropologists can begin from even the smallest fragments of bones, teeth, and joints between bones to identify gender, age, and distinguishing physical traits of a profile.
- Once a profile is begun, but the body still has not been identified, it is possible to reconstruct the decedent's image and/or face (i.e., use his/her skull bones and condition of the corpse at the time of discovery) by using photo superimposition or facial reconstruction to create how the victim looked when alive. With a facial image, it may be possible for others to identify the victim.

Example of Textual Evidence

Example of a consultant's role and justification for use:

- Libal recommends that forensic anthropologists use agencies and databases that house reports containing information on missing persons such as the FBI's National Crime Information Center, the National Center for Missing and Exploited Children. If the victim is on a missing person's report, these agencies have information to help identify the victim as quickly as possible so that a murder investigation can continue more strategically.
- Many times, forensic anthropologists use forensic artists to complete a facial reconstruction when all else has failed in identifying a victim. The facial reconstruction can be a team effort of the forensic anthropologist and artist to construct a face that highlights physical characteristics. In both chapters we read, Libal, the author, described examples of successful identification once a facial image was created and distributed publicly.

Grade 8 Literacy: Forensic Anthropology Primary and Secondary Trait Scoring Guides

Secondary Trait #1 of Assessment Task 3: Explanatory text includes domain-specific vocabulary and connecting words and phrases (i.e., transitions) to clarify relationship among ideas.

Examples of Domain-specific Vocabulary:

Examples from Steinberg's "What Is Forensic Anthropology?"

- Human remains
- Forensic odontologists
- Victim's identity
- Identification of the biological profile
- Facial reconstruction

Examples from Kohn's "Dead Men Talking"

- Reliable proof
- Crime scene
- Decomposed bodies

Examples from Libal, both chapters in *Forensic Anthropology*

- Ossification
- Osteoarthritic lipping
- Physical characteristics
- Decedent
- Skeletal disease
- Human anatomy

Examples of Connecting Words and Phrases (i.e., transitions)

- First, second, third
- Initially, to begin, then, finally, in conclusion
- Although, instead of, because of
- In this way
- Over the next few days
- While...
- Once the case is solved



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY ANNOTATED STUDENT WORK

Grade 8 Literacy: Forensic Anthropology Annotated Student Work

Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts.

Primary Trait Score Point 4

Informative/explanatory text that uses evidence from at least two texts to explain the steps and the consultants' roles with reasons for each step and each consultant. The explanation includes at least three steps that are logically sequenced and concisely explained with reasons for the steps and the order in which they are taken. The explanations of the consultants' roles in identifying the victim are clear and justified.

Student A (4 points)

I am a forensic anthropologist. As a forensic anthropologist, it is my job to identify the skeletal remains of unknown people in order to figure out who they are and why they died. Last week when I was walking my dog, he found a bone and the bone was human. It was my job to identify the body.

The first thing I did was get someone to pick up the decedent's bones and bring them to my office to examine. Then, I went to work to determine the victim's biological profile. In the article "What is Forensic Anthropology?" the author writes that the biological profile is the age, sex, height, and race of the person. Determining the biological profile is an important early step in identifying human remains. I figured out the age of the victim by checking the decedent's sutures of the skull, the teeth, the collarbone, the ends of the long bones in the arms and legs, the pubic symphysis, which is the area where the hipbones meet, and the joints between bones where the bones and cartilage meet. Angela Libal explains in the chapter "Identifying the Victim" that checking those bones and teeth help figure out someone's age because they all wear with age. After the age, I determined the sex of the decedent by checking the pelvis. The pelvis was wide so I knew it was a woman. After that, I found out the race by checking the shape of the skull, teeth and body's joints. Libal explains in "Identifying the Victim" that the skull, teeth and joints are different in the different races. Next, I found out the height of the decedent by measuring a long bone and then using a mathematic equation. Libal explains that since the body is proportionate, the length of one bone can be used to figure out the height of a person. After identifying biological profile, I checked for any marks on the bones like healed breaks, surgical marks, diseases, and abnormalities. These markings help match the bones with a missing person because markings are the same before and after death.

As a forensic anthropologist, I consulted with other people to find out who my dog found. After identifying the biological profile and unique markings, I called the FBI because they have one of the largest databases of missing people. I gave them all the information I got from examining the bones, and they searched through the database for a missing person that matched that profile. Their database did not have a match for the owner of the bones my dog found because the decedent was not reported as missing.

Since there was no match in the FBI database, I then consulted with a forensic artist. Forensic artists are important because they are able reconstruct the face of a victim. In "Giving Faces to the Lost," the author says "The artist (usually also a forensic anthropologist) uses the skull and knowledge of human anatomy to sculpt a face that will look enough like the victim to be recognizable to someone who knew her." This is significant because it explains that without a forensic artist using facial reconstruction it's hard to know what the person's face looks like. A face is needed to create a picture so others can identify the person.

Comment [VM1]: This sentence introduces the first of four steps: identifying the victim's biological profile.

Comment [VM2]: In these sentences, the writer concisely explains why s/he would identify the victim's biological profile first. The writer uses evidence from two texts to explain what the biological profile is, what bones, etc. are important in determining age, sex, and race, and how s/he determined height.

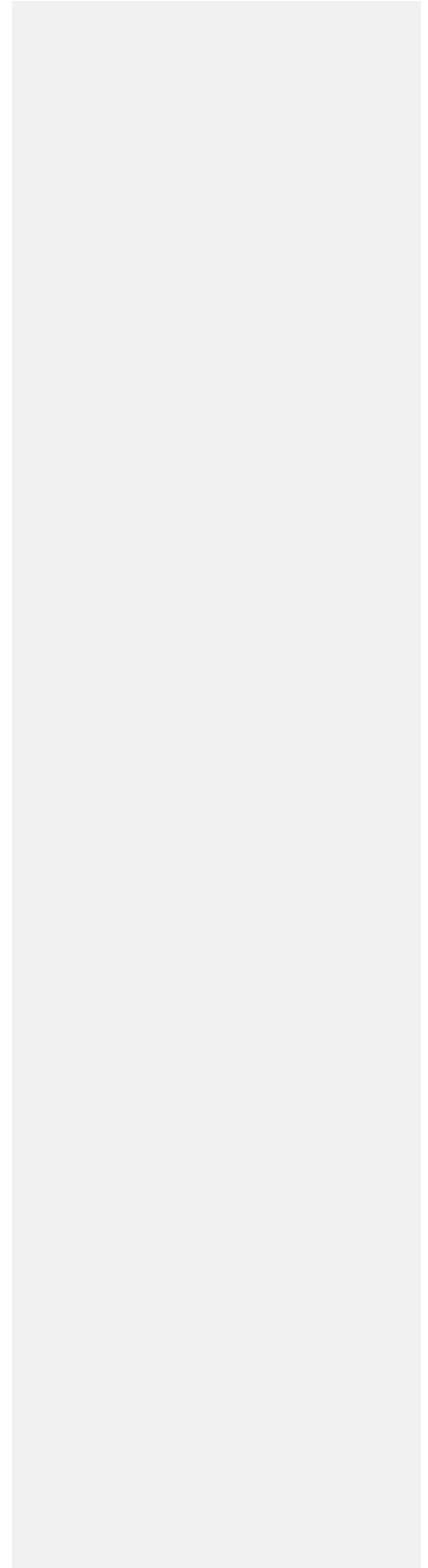
Comment [VM3]: In these sentences the writer transitions to the second step s/he would take to identify human remains. The writer provides a reason why s/he would check markings on the bones.

Comment [VM4]: The writer's third step includes the first of two consultants s/he would call. Here the writer explains why calling the FBI is important to identifying a victim.

Comment [VM5]: Here the writer provides a fourth step and another consultant. The reasons for this step/consultant are concisely explained. The writer also explains why this step is necessary by using evidence from the chapter, "Giving Faces to the Lost."

Grade 8 Literacy: Forensic Anthropology Annotated Student Work

After the bones were analyzed piece by piece and the facial reconstruction was done, the victim's family recognized the woman's picture. It turns out she was missing and her family didn't even know it. My work as a forensic anthropologist helped give a face to a once lost body.



Grade 8 Literacy: Forensic Anthropology Annotated Student Work

Summary

This student work sample provides an example of a score point 4 on the primary trait and secondary traits.

Criterion & Score Point	Evidence	Instructional Next Steps ⁺
Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts. (Score Point 4)	This informative/explanatory essay provides evidence from two texts ("Giving Faces to the Lost" and "Identifying the Victim"). The explanation includes four steps (1. determine the victim's biological profile, 2. check for any markings, 3. consult the FBI database, and 4. consult with a forensic artist to reconstruct the face). The steps are logically sequenced and concisely explained with reasons for the steps and the order in which they are taken. The explanations of the consultants' roles in identifying the victim are clear and justified: The writer explains that a facial reconstruction is necessary because the FBI database did not have any matches based on the biological profile and markings on the bones.	One next step for this student would include working with the student to strengthen his/her introduction and conclusion. The student may benefit from studying and discussing introductions and conclusions from other explanatory texts noting their features and potential impact on readers. Another instructional next step would be to have this student work toward the grade 9-10 standards for informative/explanatory text.
Secondary Trait: Explanatory text includes domain-specific vocabulary and connecting words and phrases (i.e., transitions) to clarify relationships among ideas. (Score Point 4)	The writer includes accurate and fully integrated domain specific vocabulary (e.g., consistently refers to the skeletal remains as the "decedent"; uses words/phrases such as "biological profile," "pubic symphysis," and "pelvis" accurately). The writer uses transitions that are appropriate to the content and help to clarify relationship among ideas (e.g., "After identifying the biological profile..." "Since there was no match in the FBI database...").	
Secondary Trait: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing. (Score Point 4)	The writer consistently uses standard English grammar and usage, in particular, accepted use of capitalization, punctuation, and spelling.	

⁺ Instructional next steps are provided for only the primary trait.

Grade 8 Literacy: Forensic Anthropology

Annotated Student Work

Primary Trait Score Point 3

Informative/explanatory text that uses evidence from at least two texts to explain the steps and the consultants' roles with reasons for each step and consultant. The explanation includes a list of at least three steps with general or incomplete reasons provided for the steps. General or incomplete explanations of the consultants' roles in identifying the victim are included.

Student B (3 points)

One day as I was walking my dog down the block he randomly frees himself and runs away. As I am chasing after him I see him digging in the dirt. Then when I am overlooking him to see what he is doing I realize he has picked out a bone. When I examine the bone it had come to my attention that this was the bone of a human being. At that moment I realized that this was the job for a forensic anthropologist like myself.

The first thing I did was carefully collect the rest of the remains at the crime scene. I put them in the plastic bag that I was planning to use for my dog. Once I had gathered all the bones and jewelry, even some bloody cloths I immediately went to the lab to check this out.

Once I got to the lab the first thing I must find out is the sex, age, race and height. This biological profile as explained in the chapter, "Giving Faces to the Lost," is usually the start of an investigation. I soon discovered that the bones belonged to a 14 year old girl who was a 5' 3 hispanic. Then there's an examination for tattoos, piercings, scars, etc. not much was found except two ear piercings in this case. We still didn't know the identity of the female victim. It was necessary to hand over the skull to a forensic artist for facial reconstruction. As he worked on constructing what was most likely be the face of the girl, I went to get some help from a blood specialist to examine the blood spatter on the earth I found.

With the face model that the facial artist made, we asked for help to post pictures of the facial model on neighborhood bulletin boards and in stores. As results came back we were able to get a match on the face of the girl from two store clerks and contacted the family. They told us that they still believed she was on her camping trip that's why they didn't file a missing child. Eventually I got some help from forensic odontologist to find the dental records of this young lady. This was to confirm the family's identification of Alvarez. Finally, as the DNA of the blood came back it turned out to be the murder's blood. Overall the story was that he was stabbed in the leg by the girl when she was trying to defend herself. He was sentenced to jail for life for the murder of Alexis Alvarez.

Comment [VM6]: This sentence introduces the first step the writer would use to identify the remains.

Comment [VM7]: Here the writer introduces the second step and provides a brief explanation of why this step using evidence from one text.

Comment [VM8]: Here the writer provides the third step; however, s/he does not explain the reasons for this step. The information for this step is provided in one of the unit texts although the writer does not explicitly name the text.

Comment [VM9]: The writer's fourth step, provided in these sentences, includes a person who would be consulted as well as a reason why this step is necessary. The reason, however, is incomplete and general.

Comment [VM10]: The writer provides another step in the process of identifying the victim, but does not write any reasons for this step and consultant.

Comment [VM11]: The writer's final step, provided in these sentences, includes a person who would be consulted with an incomplete reason for his/her involvement. Here we see an example of the writer's use of domain-specific vocabulary.

Grade 8 Literacy: Forensic Anthropology Annotated Student Work

Summary

This student work sample provides an example of a score point 3 on the primary trait and secondary traits.

Criterion & Score Point	Evidence	Instructional Next Steps ⁺
Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts. (Score Point 3)	This informative/explanatory essay provides evidence from two texts ("Giving Faces to the Lost" and "Identifying the Victim"); however, only "Giving Faces to the Lost" is explicitly cited. The explanation includes at least five steps. The explanation of the reasons for the steps is often general or incomplete (e.g., no reason is given for why it is necessary to examine the remains for tattoos, piercings, and scars). As with the steps, the explanations of the consultants' roles are general and incomplete.	An instructional next step is to work with this writer to develop his/her explanations with concrete details and relevant evidence. That would include supporting the writer to name the texts/sources of information that s/he references.
Secondary Trait: Explanatory text includes domain-specific vocabulary and connecting words and phrases (i.e., transitions) to clarify relationships among ideas. (Score Point 4)	The writer includes accurate domain-specific vocabulary (e.g., "biological profile," "facial reconstruction," "forensic odontologist"). The writer uses transitions that are appropriate to the content and help to clarify relationship among ideas (e.g., "Once I got to the lab the first thing I must find out is...", "I soon discovered that..." "As he worked on constructing the face...").	
Secondary Trait: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing. (Score Point 3)	The writer generally uses standard English grammar and usage, in particular, accepted use of capitalization, punctuation, and spelling. There are some grammatical and usage errors; however, because this is an on demand task, minor errors are expected. Additionally, the errors do not get in the way of a reader's comprehension.	

⁺ Instructional next steps are provided for only the primary trait or the "heart" of the task. Suggestions to improve achievement of a secondary trait (s) can go in multiple directions and the direction suggested cannot be determined until the student writer has achieved at least a satisfactory achievement of the primary trait.

Grade 8 Literacy: Forensic Anthropology Annotated Student Work

Primary Trait Score Point 2

Informative/explanatory text is only partially complete or has inaccuracies. For example, textual evidence from two texts is used, and three written steps and consultants' roles may be included. However, written reasons, if included, for steps and/or consultants have inaccuracies.

Student C (2 points)

If I were to find human remains as a forensic anthropologist, I would first have the correct instruments to identify the person. I would have measurement instruments for finding the gender, age, and race of the person. Once I got those, I go to a person who keeps records of missing persons, and narrow it down by my answers. I now have possible matches for the remains.

After I have matches for the remains, I would contact a dentist for dental records. If the remains still have teeth, I would be able to narrow it down even more. Finally, with photo superimposition I can find a match. That's one way I can find the identity of the remains of a person.

Comment [VM12]: This sentence provides the writer's first step. The step and the reasons for this step are not explained. Additionally, "measurement instruments" is used inaccurately. As at least one of the article's authors explains, they are not used to determine gender, age, and race. Instead, as explained, forensic anthropologists conduct examinations of the bones, often without the use of specific measurement instruments.

Comment [VM13]: Here, the writer provides his/her second step and one person with whom s/he would consult. Again, the reasons and explanations are incomplete.

Comment [VM14]: This paragraph provides steps three and four along with another person with whom to consult to identify the victim. As with the other steps/consultants, the reasons and explanations are incomplete.

Grade 8 Literacy: Forensic Anthropology Annotated Student Work

Summary

This student work sample provides an example of a score point 2 on the primary trait and first secondary trait and a score point 3 on the second secondary trait.

Criterion & Score Point	Evidence	Instructional Next Steps ⁺
Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts. (Score Point 2)	This informative/explanatory essay includes evidence from two texts; however, the texts are not cited. The explanation includes four steps and two consultants. The steps are logically sequenced but are not explained with reasons for the steps and the order in which they are taken (e.g., the writer does not explain how dental records would help with identifying a victim). The explanations of the consultants' roles are not clear or justified.	Instructional next steps would include working with this writer to develop his/her reasons and explanations with concrete details and relevant evidence.
Secondary Trait: Explanatory text includes domain-specific vocabulary and connecting words and phrases (i.e., transitions) to clarify relationship among ideas. (Score Point 2)	The writer has limited use of domain-specific vocabulary. The domain-specific vocabulary that is used includes "forensic anthropologist," "remains," and "photo superimposition." There are places, however, where domain-specific vocabulary could be used but is not. For example, the writer says s/he would contact "a person who keeps records of missing persons" rather than naming organizations that keep those records. Transitions are used but are limited in how they help to clarify the relationships among ideas.	
Secondary Trait: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing. (Score Point 3)	The writer consistently uses standard English grammar and usage, in particular, accepted use of capitalization, punctuation, and spelling. There are some grammatical and usage errors; however, because this is an on demand task, minor errors are expected. Additionally, the errors do not get in the way of a reader's comprehension.	

⁺ Instructional next steps are provided for only the primary trait or the "heart" of the task. Suggestions to improve achievement of a secondary trait (s) can go in multiple directions and the direction suggested cannot be determined until the student writer has achieved at least a satisfactory achievement of the primary trait.

Grade 8 Literacy: Forensic Anthropology

Annotated Student Work

Primary Trait Score Point 1

Paper is more a summary than an explanation. It includes few ideas, examples, or roles drawn from the two texts related to the prompt that demonstrate an accurate understanding of the steps or consultants specific to this investigation.

Student D (1 point)

As a forensic anthropologist, it is my job to look after and find human bones. After finding human bones, I must identify the body. To give this person an identity, I must first look at the reports I have from people missing. Then, I'm going to see if the body matches with the report that people gave. Next I will see what happens with the person and maybe why he died or gone missing and I will find out who was the person who killed the person and that person will pay the consequences.

Comment [VM15]: The writer provides three steps, but they are not logically sequenced. For example, one cannot look at reports of "people missing" unless one knows the victim's biological profile. The writer does not cite any texts or provide information regarding consultants' roles in identifying the victim.

Grade 8 Literacy: Forensic Anthropology Annotated Student Work

Summary

This student work sample provides an example of a score point 1 on the primary trait and first secondary trait, and a score point 2 on the second secondary trait.

Criterion & Score Point	Evidence	Instructional Next Steps ⁺
Primary Trait: Explanation of a topic, which cites and organizes relevant evidence from two texts. (Score Point 1)	This informative/explanatory essay includes few ideas and examples drawn from texts that demonstrate an accurate understanding of the steps specific to the investigation. Additionally, the steps are not logically sequenced (i.e., one cannot see if the body matches reports of missing people without first doing an examination of the bones to determine the victim's biological profile). The writer does explain the people with whom s/he would consult to identify the victim. Finally, the writer shows some inaccuracies. For example, forensic anthropologists determine manner and cause of death, but they do not typically work to find out who killed a victim.	Instructional next steps would include working with this writer to gather information from texts related to answering the prompt and then to select and logically sequence the information. Additionally, next steps would include supporting the writer to develop his/her explanations with concrete details and relevant evidence.
Secondary Trait: Explanatory text includes domain-specific vocabulary and connecting words and phrases (i.e., transitions) to clarify relationship among ideas. (Score Point 1)	Other than referring to him/herself as a "forensic anthropologist," the writer uses no domain-specific vocabulary. For example, the writer refers to the skeletal remains as "body," "human bones," and "person" rather than decedent or skeletal remains. Transitions are used but are limited in how they help to clarify the relationships among idea.	
Secondary Trait: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing. (Score Point 2)	The writer sometimes uses standard English grammar and usage, in particular, accepted use of capitalization, punctuation, and spelling.	

⁺ Instructional next steps are provided for only the primary trait or the "heart" of the task. Suggestions to improve achievement of a secondary trait (s) can go in multiple directions and the direction suggested cannot be determined until the student writer has achieved at least a satisfactory achievement of the primary trait.



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY INSTRUCTIONAL SUPPORTS

The instructional supports on the following pages include a unit outline with formative assessments and suggested learning activities. Teachers may use this unit outline as it is described, integrate parts of it into a currently existing curriculum unit, or use it as a model or checklist for a currently existing unit on a different topic.

Unit Outline –Grade 8 Literacy

INTRODUCTION: This unit outline provides an example of how to integrate performance tasks into a unit of instruction. *Teachers may (a) use this unit as it is described below; (b) integrate parts of it into a currently existing curriculum unit; or (c) use it as a model or checklist for a currently existing unit on a different topic.*

Grade 8 Literacy: Dead Men Do Tell Tales

UNIT TOPIC AND LENGTH:

- This unit uses the topic of forensic anthropology as a means to teach students how to analyze and navigate informational texts. As part of the unit, students read four informational texts on the subject of forensic anthropology and complete assessment tasks. The assessment tasks build in complexity and are sequenced to scaffold student learning. The unit length is approximately 4-6 weeks.

COMMON CORE LEARNING STANDARDS:

- **RI.8.1** Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- **RI.8.4** Determine the meaning of words and phrases as they are used in a text, including figurative, connotative and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
- **RI.8.10** By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.
- **L.8.1** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.
 - b. Form and use verbs in the active and passive voice.
 - c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
 - d. Recognize and correct inappropriate shifts in verb voice and mood.
- **L.8.2** Demonstrate command of the conventions of standard English capitalization, punctuation and spelling when writing.
 - a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.
 - b. Use an ellipsis to indicate an omission.
 - c. Spell correctly.
- **W.8.2:** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts and information into broader categories; include formatting (e.g. headings), graphics, (e.g. charts or tables), and multimedia when useful in aiding comprehension.
 - b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
 - c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.

Unit Outline –Grade 8 Literacy

- d. Use precise language and domain specific vocabulary to inform about or explain the topic.
- e. Establish and maintain a formal style.
- f. Provide a concluding statement or section that follows from and supports the information or explanation presented.

- **SL.8.1:** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 8 topics, building on others' ideas and expressing their own clearly.

BIG IDEAS & ENDURING UNDERSTANDINGS:

- Unpacking informational text leads to a greater understanding of a complex topic or scenario.
- Science can help us solve mysteries in the real world.

ESSENTIAL QUESTIONS:

- How can I use the features of informational text to deepen my understanding of forensic science?
- How can scientific observations and information give voice to the dead?

CONTENT:

Informational Text Reading:

- Word-Work/Figurative Language: (Jargon, Idioms, Personification)
- Connotative and technical meanings
- Connection between word choice and tone or meaning
- Text Structure: (Headings, Graphics (tables, charts, etc.), Inserts, (case studies), Use of Bullets and semi-colons for listing, Captions
- Decoding Strategies
- Academic / Domain specific Vocabulary
- Process for drawing conclusions from text

Informational Text Writing:

- Connecting Words and Phrases (i.e., transitions): (First, second, third, initially, to begin, then, finally, in conclusion, although, instead of, because of, in this way, Over the next few days, While...
- topic and convey ideas, concepts, and information
- formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia
- conventions of standard English grammar and usage
- conventions of standard English

SKILLS:

- **Analyze and make** meaning of figurative language.
- **Determine** the meaning of words and phrases as used in the text
- **Gain** a working knowledge of domain specific vocabulary in context
- **Read and decode** complex informational text
- **Decipher** relevant information in complex informational texts
- **Determine** a central idea and analyze its development
- **Identify** clues in the text that lead to inferring information
- **Describe** connections between word choice and impact on meaning or tone
- **Support** conclusions with relevant words or phrases from the text
- **Explain** the process for drawing a conclusion in forensic science from a given text

- **Cite** textual evidence to support written responses
- **Develop** a topic with relevant, well-chosen facts, definitions, concrete details, quotes, and examples
- **Clarify** the relationships among ideas and concepts using transitions
- **Introduce** a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories
- **Edit** for capitalization and spelling in writing.
- **Edit** for punctuation (comma, ellipsis, dash) to indicate a pause or break.

Unit Outline –Grade 8 Literacy

<p>capitalization, punctuation, and spelling</p> <p>-----</p> <p>Forensic Science</p> <ul style="list-style-type: none"> ➤ The process of evidence collection and observation ➤ Properties of matter (physical and chemical) ➤ Elements and compounds ➤ solids, liquids, gasses (states of matter) ➤ Measurement and the metric system (basic units) ➤ Faces of the Dead:(Ossification, Osteoarthritic lipping, Physical characteristics, Decedent, Skeletal disease, Human anatomy, Physics of bone fractures) ➤ Forensic Anthropology: (Human remains, Forensic odontologists, Victim’s identity, Identification of the biological profile, Facial reconstruction) ➤ Scientific Process: (Reliable proof, Crime scene, Decomposed bodies) ➤ Relevant vs. irrelevant information 	<ul style="list-style-type: none"> ➤ Use an ellipsis to indicate an omission. ➤ Revise for appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts ➤ Revise for precise language and domain-specific vocabulary to inform about or explain the topic ➤ Synthesize relevant facts, definitions, details and information ➤ Establish and maintain a formal style ➤ Provide a substantiated concluding statement <p>-----</p> <ul style="list-style-type: none"> ➤ Define and distinguish the physical and chemical properties of matter ➤ Describe how to use the basic units of the metric system ➤ Define and distinguish elements and compounds ➤ Contrast the differences between a solid, liquid, and gas ➤ Explain how to examine fractures to determine the direction of impact ➤ Describe the proper collection of evidence and documentation of observations ➤ Use domain specific vocabulary accurately in writing and in speech ➤ Describe the scientific process and how it is used in forensic science ➤ Explain the importance of precision when working with evidence and observations ➤ Evaluate reliability of evidence sources ➤ Compare and Contrast relevant and irrelevant evidence and information
<p>VOCABULARY:</p> <p>Forensic Anthropology, Trauma, Odontologist, Autopsy, DNA, Ballistics, Pathology, Case Study, Decedent, CT- Scan, Resin, Fiber Analysis, Sutures, Diaphysis, Ossification, Dentition, Deciduous teeth, Puberty, Gracile, Cranium, Ocular orbits, Residue, Adipocere</p>	

Unit Outline –Grade 8 Literacy

ASSESSMENT EVIDENCE AND ACTIVITIES:

INITIAL ASSESSMENT

After completing the least complex of texts in the sequence, along with a lesson on domain specific vocabulary word work, students will be asked to write 2-3 paragraphs to explain the forensic anthropologist's role in the science of solving crimes. Students will be asked to mirror the author's writing method (i.e. use of bullets, chunked paragraphs) in order to assess a rudimentary knowledge of informational text structure. Students must also use relevant forensic anthropology and crime-solving vocabulary in their writing.

FORMATIVE ASSESSMENT: FIGURATIVE VS. LITERAL LANGUAGE

This assessment task asks students to write a two paragraph response to explain the literal and figurative meaning of the unit text "Giving Faces to the Lost" using evidence from the text. *Please see task 1 for the exact prompt and full details on this task.*

FORMATIVE ASSESSMENT: THINKING PERFORMANCE: AUTHENTIC TASK

To assess student ability to synthesize information across texts, after having completed the four major texts in the unit, students are asked to think about the common expression "Dead men tell no tales" and use evidence from two unit texts to write a response explaining how the dead can tell tales. *Please see task 2 for the exact prompt and full details on this task.*

FINAL PERFORMANCE TASK:

The final task asks students to write an informative/explanatory essay in which they explain the steps they would take and people they would consult as a forensic anthropologist to identify the remains of a human body using textual evidence from at least two unit texts. This task assesses students' ability to recognize relevant vs. irrelevant information in informational text. Students must be able to navigate complex text in order to build their understanding, and this task asks them to role-play in order to provide evidence of understanding of content and domain-specific vocabulary. They must be able to determine a central idea of a text and analyze its development over the course of multiple texts. *Please see task 3 for the exact prompt and full details on this task.*

LEARNING PLAN & ACTIVITIES:

Graphic Organizers: *What is Anthropology?/ Forensic Anthropology?*

K-W-L is an instructional activity for assisting students in developing a framework and actively engaging students in constructing meaning from text. The basic instructional activity consists of three parts.

- First, readers identify what is **KNOWN** about a topic.
- Second, the readers identify what they **WANT** to know about the topic.
- Finally, the reader identifies what was **LEARNED** from reading the text.

B-K-W-L-Q: follows the same steps. However, two steps are added to the activity. **B** is for building background knowledge. **Q** is for new questions after the initial reading and prior to further reading.

1. The teacher reads a selection to students related to the topic for study other than the required text. This provides students with some background knowledge related to the topic. In the **B** column students describe

Unit Outline –Grade 8 Literacy

or draw something about the topic.

2. Students' list new questions (**Q**) they have concerning the topic after the initial reading and prior to reading the required text.

3. Then students use the **K-W-L Plus** activity as outlined above.

BIG FOX- How to Pre-read Non-fiction:

Bold – List any words or phrases that are in bold print.

Italics – List any words or phrases that are in italics.

Graphics – Describe any graphics. (*photos, drawings, graphs, charts, maps, tables, etc.*)

Facts – List at least 5 facts found in the article.

Opinions – List any opinions found in the article.

X marks the spot – or at least the main point. In 2- 3 sentences, write the main point of the article. (*Hint – read the topic sentence of each paragraph.*)

Turn, Talk, and Write Discussions: *How do we interact with the text and each other in terms of citing relevant information and using knowledge of text structure to find it?*

With a partner, complete the following questions after you read:

- i. How does this article begin and why do you think that the author chose to begin the article this way?
- ii. What are the major qualities /aspects of a person that the bones can help to uncover? (age, sex/gender, race, height, individual characteristics,, etc.)
- iii. Using your answers from number 3, if you could rely upon only one characteristic to try to identify the body/solve the crime, which one would you choose to find out first and why?
 - a) Age
 - b) Gender
 - c) Race
 - d) Height
 - e) Individual characteristics

Reflection: How is this nonfiction text organized? List features that you noticed (e.g. Headings) What are features of this article that helped you in understanding the article and answering the questions about forensic anthropology?

Video Viewing Graphic Organizer:

In this unit, the use of several video clips and documentary features/science-fiction programming supplements our understanding. In order to document our ability to pull relevant facts and information AND cross analyze video with text, the use of a video viewing guide organizer is necessary.

NAME_____

DATE_____

FORENSIC FILES...

1. Identify any jargon you notice in the video. Provide a definition using information from the video, context clues, or a dictionary.
2. You have identified particular features of a nonfiction *article*. What are some features of this nonfiction video?
3. Compare and contrast the nonfiction *articles* you read with this *video*. Why might someone choose to present information by video rather than through an article? Why might someone present information through an article rather than through a video like Forensic Files?

Unit Outline –Grade 8 Literacy

Dramatization:

Students will become Forensic Anthropologists by researching a crime scene that has been compromised. Student groups will create tableau illustrating a crime scene in which evidence points to the culprit. The other groups must examine the scene for evidence without disturbing the crime scene. Teams not in tableau (or in the “audience”) must collect as many facts as possible and draw provable conclusions to explain what occurred.

Response to literature:

In their Journals, students will respond to the following prompt:

What Happened To Richard Covey? What clues from the poem support your explanation?

Or

Using a body outline worksheet: From the perspective of “the people on the pavement” students will write the people’s perspective of Richard Cory around the body outline.

Role Playing:

An investigator is trying to find out more about Richard Cory’s life in order to investigate why he might have shot himself, or possibly have been murdered. Read the role below, and write a 1-2 paragraph testimony telling the investigator what you know about Richard Cory’s life, and why he might have killed himself or have been murdered. Remember that you are bound by an oath to tell the truth, and that the investigator will want to know your name.

Various Roles to give Students

Richard Cory’s Best Friend and Business Partner: At the time of his death, you probably knew him best. What do you really think about the circumstances surrounding his death? When was the last time you saw him? What kind of friendship did the two of you have? What types of things did you do together? What kind a person was the “real” Richard Cory?

Richard Cory’s Ex-Wife: You have not seen him in some time, but the investigator will want to know exactly how long and the circumstances surrounding your breakup. Were there ever any good times with Richard, or was it all bad? Surely there is a side of Richard that only you know, and the investigator will expect that you have an opinion on how and why Richard died.

Richard Cory’s Butler: A loyal and humble servant, you oversaw *all* of the happenings at the Cory estate for the past 40 years. Were you shocked at all by Richard’s death? What reasons do you think he would have to kill himself? Who had been coming in and out of the mansion? What do you know about it?

RESOURCES:

TEXT:

Poetry:

“Richard Cory”, Edwin Arlington Robinson

“How Many Times?” Majorie Agosin, <http://being.publicradio.org/programs/2010/laying-the-dead/agosin-poetry.shtml>

Unit Outline –Grade 8 Literacy

Non-Fiction/Informational Text:

“What is Forensic Anthropology”, R.U. Steinberg

“Dead Men Talking: Solving Crime Through Science”, David Kohn

Examples from Libal, both chapters in *Forensic Anthropology*

“Identifying the Victim,” Angela Libal

“Giving Faces to the Lost”, Angela Libal

“Forensic Detective: How I Cracked the World's Toughest Cases”, Robert Mann and Miryam Williamson

Interactive Website- Exploration of a crime scene

<http://www.mysterynet.com/see/crimescene/>

<http://www.crimescene.com/current/index.php>

<http://www.crimeandclues.com/>

<http://www.crimescenegame.com/>

<http://www.indiana.edu/~ensiweb/lessons/crime.html>

http://www.pbs.org/wgbh/nova/teachers/activities/3011_redbaron.html

Multi-Media Resources:

CSI (NY, Miami, Las Vegas)

Tru TV (http://www.trutv.com/shows/forensic_files/index.html)

Six Feet Under

Bones

<http://www.all-about-forensic-science.com/trace-evidence.html>

<http://investigation.discovery.com/interactives/interactives.html>

Assessment Task 1

The title, “Giving Faces to the Lost,” has both literal and figurative meaning. In two paragraphs, explain both the literal and figurative meaning of the phrase using evidence from the chapter “Giving Faces to the Lost” to support your explanation. Your response should be written for an audience that is familiar with the text and follow the conventions of standard English, including capitalization, punctuation, and spelling.

Use the blank space below to take notes. Your notes will be collected but not graded. Compose your essay on the following page. After you’ve written your essay, answer the StepBack questions. Like your notes, your responses to the StepBack questions will be collected but not graded.

Answer the questions below to plan your writing. Your answers will be collected but not graded. Compose your informative/explanatory essay on the following pages.

Prepare to Write:

1. What do you have to read and write to complete this task? In other words, what is this task asking you to do?
2. What are the components or parts of the task?
3. What will you do first, second, third, etc.?

Space for Notes:

Compose Your Essay in the Space Below:

This image shows a single page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

StepBack Questions: Please answer the following questions in the space below. Your responses will be collected but not graded.

Ø What did you do to complete the assessment task? List the steps that you took to complete the task.

Ø What did you find easy about the assessment task?

Ø What did you find difficult about the assessment task?

Grade 8 Literacy: Forensic Anthropology
Primary Trait Scoring Guide for Assessment Task

Primary Trait: Explanation of an analysis of the figurative and literal meaning of a phrase from a text.

Scoring Guide

Score Point	Description
4	Informative/explanatory text that accurately determines and explains the figurative and literal meaning of the phrase, “giving faces to the lost.” Explanation is a relevant and concise analysis of textual evidence on “giving faces to the lost,” using what the text says explicitly as well as inferences drawn from the text.
3	Informative/explanatory text that accurately determines and explains both the figurative and literal meaning of the phrase, “giving faces to the lost.” The textual evidence analyzed is relevant to determining the meanings of the phrase. The analysis of explicit or inferential evidence is general or incomplete.
2	Informative/explanatory text that accurately determines either the figurative or literal meaning of the phrase “giving faces to the lost.” The explanation makes minor reference to the text or does not explain or analyze the evidence fully.
1	Informative/explanatory text is mostly a general discussion of the phrase “giving faces to the lost.” The explanation does not clearly, completely, or accurately determine both the figurative and literal meaning of the title. The explanation may use evidence that does not come from the text.

Grade 8 Literacy: Forensic Anthropology
Primary Trait Scoring Guide for Assessment Task

Secondary Trait of Assessment Task 1: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing.

Scoring Guide

4	Consistently uses standard English grammar and usage, including accepted use of capitalization, punctuation, and spelling.
3	Generally uses standard English grammar and usage, including accepted use of capitalization, punctuation, and spelling.
2	Only sometimes uses standard English grammar and usage, including accepted use of capitalization, punctuation, and spelling.
1	Little evidence of use of standard English grammar and usage, including accepted use of capitalization, punctuation, and spelling.

Grade 8 Literacy: Forensic Anthropology

Primary Trait Scoring Guide for Assessment Task

Explicit Statements about What Will Be Expected As Evidence of a Score Point 4

Primary Trait: Explanation of an analysis of the figurative and literal meaning of a phrase from a text.

Score Point 4

Informative/explanatory text that accurately determines and explains the figurative and literal meaning of the phrase, “giving faces to the lost.” Explanation is a relevant and concise analysis of textual evidence on “giving faces to the lost,” using what the text says explicitly as well as inferences drawn from the text.

Literal Meaning	
Example Explanation of Literal Meaning: In cases where decedents cannot be identified based on their biological profile or dental records, forensic anthropologists/artists may do facial reconstruction to create a face of decedents so that people might recognize them.	Example Evidence to Support Literal Meaning: In the case of Mwivano, whose face had been cut off after being raped and murdered by her cousin, a forensic anthropologist and artist used her skull to reconstruct a model of her face (i.e., facial reconstruction).
Figurative Meaning	
Example Explanation of Figurative Meaning: Matching unidentified remains with the names of missing persons is a way forensic anthropologists solve identification or missing person’s investigations.	Example Evidence of Figurative Meaning: Forensic investigators discover a decedent’s identity through bones, dental work, and X-rays. They match characteristics from bones, dental work, X-rays, and other means with lists of missing persons to find a match. Through this process, they are able to connect remains to a missing person thus giving a name (and face) to a missing or lost person.

Assessment Task 2

There's a common expression in detective stories that "Dead men tell no tales." The authors of the texts we read in this unit would disagree. In approximately one page, explain how the dead can tell tales. Use evidence from two unit texts that most strongly supports your explanation of how the dead tell tales. Your response should be written for an audience that is familiar with the texts and follow the conventions of standard English, including capitalization, punctuation, and spelling.

Texts you may use to complete your essay include:

- "What is Forensic Anthropology?" by R.U. Steinberg
- "Dead Men Talking: Solving Crime Through Science" by David Kohn
- "Identifying the Victim" by Angela Libal
- "Giving Faces to the Lost" by Angel Libal

Answer the questions below to plan your writing. Your answers will be collected but not graded. Compose your informative/explanatory essay on the following pages. After you've written your text, answer the StepBack questions. Your responses to the StepBack questions will also be collected but not graded.

Prepare to Write:

1. What do you have to read and write to complete this task? In other words, what is this task asking you to do?
2. What are the components or parts of the task?
3. What will you do first, second, third, etc.?

Space for Notes:

Compose Your Essay in the Space Below:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, text, or other markings on the page.

StepBack Questions: Please answer the following questions in the space below. Your responses will be collected but not graded.

Ø What did you do to complete the assessment task? List the steps that you took to complete the task.

Ø What did you find easy about the assessment task?

Ø What did you find difficult about the assessment task?

Grade 8 Literacy: Forensic Anthropology

Primary Trait Scoring Guide for Assessment Task 2

Primary Trait: Explanation of a topic through the analysis and selection of relevant evidence from two texts.

Scoring Guide

4	Informative/explanatory text that concisely and accurately answers the question of how the dead tell tales. Explanation includes relevant textual evidence from at least two texts that explicitly connects the idea that information gathered from dead bodies can lead to victim identification or cause of death.
3	Informative/explanatory text that accurately answers the question by explaining how the dead tell tales. Explanation may include relevant textual evidence from at least two texts, but the explanation does not explicitly connect the idea that the information gathered from dead bodies can lead to victim identification or cause of death.
2	Informative/explanatory text that shows some understanding of key ideas regarding how information gathered from dead bodies can lead to victim identification or cause of death. Explanation refers generally to ideas from texts but does not show how the information gathered from dead bodies leads to identification or cause of death.
1	Informative/explanatory text is mostly a general description or listing with no evidence from texts to show how information gathered from dead bodies can lead to victim identification or cause of death. Explanation shows an incomplete or inaccurate understanding of the text about how the dead can tell tales.

Grade 8 Literacy: Forensic Anthropology

Primary Trait Scoring Guide for Assessment Task 2

Secondary Trait of Assessment Task 2: Student explanation demonstrates use of standard English focusing on standard capitalization, punctuation, and spelling when writing.

Scoring Guide

4	Consistently uses standard English and standard capitalization, punctuation, and spelling.
3	Generally uses standard English and standard capitalization, punctuation, and spelling.
2	Only sometimes uses standard English and standard capitalization, punctuation, and spelling.
1	Little evidence of use of standard English and standard capitalization, punctuation, and spelling.

Grade 8 Literacy: Forensic Anthropology
Primary Trait Scoring Guide for Assessment Task 2
Explicit Statements about What Will Be Expected as Evidence of a Score Point 4

Primary Trait: Explanation of a topic through the analysis and selection of relevant evidence from two texts.

Score Point 4

Informative/explanatory text that concisely and accurately answers the question of how the dead tell tales. Explanation includes relevant textual evidence from at least two texts that explicitly connects the idea that information gathered from dead bodies can lead to victim identification or cause of death.

Example of Information Used to Determine a Victim's Identity and Cause of Death	Example of Relevant Evidence
The look and feel of a victim's bones can help to determine identity.	In the case of the man found in a burned car in Mexico, Dr. Bass determined that body was not that of the 30 year-old man who was said to be in the car. Instead, Dr. Bass determined it was a much older man because of the arthritic bones.
A victim's skull can provide evidence to help determine identity or cause of death.	<ul style="list-style-type: none"> • In the case of Mwivano, whose face had been cut off after being raped and murdered by her cousin, a forensic anthropologist and artist used her skull to discern details about the knife the murderer used as well as to reconstruct a model of her face. Then they photographed the model and placed copies of it around the community, allowing her cousin's former wife to identify her when she saw Mwivano's image in a local grocery store bulletin. • Photo superimposition is a process that can be used to figure out a victim's identity from a list of possible identities: A photograph of person taken while she was still alive is superimposed over a victim's skull to see if there is a match. • Facial reconstruction is a process investigators use to identify a decedent when there have been no missing reports filed. Basically, they use a combination of techniques and skills from art and science (e.g., knowledge of human anatomy) to reconstruct a person's face using the victim's skull as their starting point.
A victim's medical and dental records can help to match a decedent's remains to a missing person.	Dental procedures and medical or surgical appliances can be traced back to doctors and manufacturers who can identify the patient or at least help to narrow the range of possible identities.



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY SUPPORTS FOR ENGLISH LANGUAGE LEARNERS

GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY

Supports for ELLs

English Language Learners may be at different levels of English proficiency and may require multiple entry points into the unit lessons. Therefore, the following recommendations should be implemented by the teacher.

Pre-Reading Activities

- Pre-teach essential vocabulary and build background knowledge
 - a) Provide prefixes and corresponding Greek etymology clues, cognates
 - b) Provide a set of 4 pictures with context clues that can help build schema around the concept(s)
 - c) Provide a brief text (adapted with redundant/abundant information on the essential terms)
- Anticipatory Guide

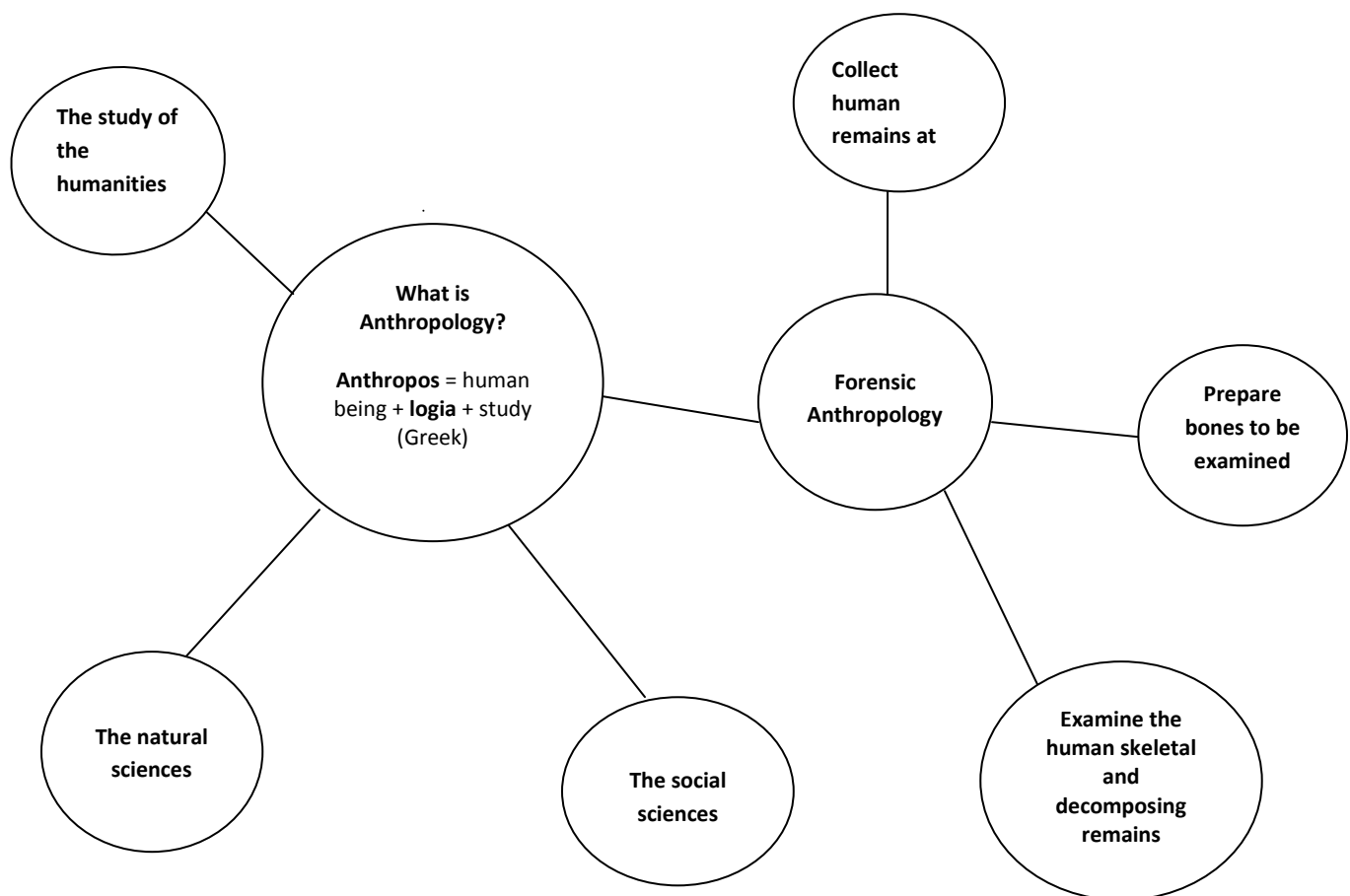
The Anticipatory Guide is used to prepare students for interacting with the text by activating their prior knowledge and building schema. Students will be directed to form groups of four. Distribute the Anticipatory Guide and ask students to place a checkmark under the column that best represents their opinions for each statement and provide at least one reason for their choices.

Anticipatory Guide					
STATEMENT	Your Opinion		Finding in Text		Evidence that Refutes Your Opinion
	AGREE	DISAGREE	SUPPORT	NO SUPPORT	If the text does not support your opinion, explain why not, in your own words
1. Forensic anthropologists conduct autopsies.					
2. The term <i>anthropology</i> comes from the Greek “anthropos.”					
3. Forensic anthropologists do not testify in court about victims’ identities or injuries.					

4. Forensic anthropologists perform DNA tests.					
5. Anthropology is a science.					

- Semantic Map

Brainstorming activity on anthropology and forensic anthropology: create a semantic map to include the theme and a sub-theme that helps further organize students' ideas. This may include phrases, sentences, questions and responses, captions, and images to explain the terms.



The K-W-L Plus (B-K-W-L-Q) graphic organizer should be completed individually first, and then shared within small groups.

During Reading Activities

- Preview Matrix (BIG FOX)

Teachers will direct students to interact with the text, to identify and familiarize themselves with nonfiction text structures. The BIG FOX may be too complex for ELLs to comprehend without prior scaffolding tasks. Therefore, provide the following accommodations for ELLs:

Text Features	Evidence from the Text	
Bold	List 2 to 3 words or phrases	
Italics	List 2 to 3 words or phrases	
Graphics	Describe any graphics (photos, drawings, charts, etc.)	
Facts	List 2 to 3 facts	
Opinions	List any opinions	
X marks the spot (the main point of the article)	Write the main point of the article.	

Direct the students to read the text with a focus, interact with the text, and complete the matrix. Students will identify selected text features and complete a matrix.

- Reading with a Focus Matrix

Focus Questions	Evidence from the text
What is the main idea of the text?	<hr/> <hr/> <hr/>
What are some supporting details?	<hr/> <hr/> <hr/>

Steps:

1. Individually complete the requested information in the notebooks
2. Share in groups of four in a Round Robin format
3. Reach consensus within the group and finalize a group chart

- Turn, Talk, and Write Discussions

This task can be modified into an Interacting with Text task, by including the questions listed after the reading (Parts I, II, and III) as focus questions during the reading. Part IV can be used as an extension activity after the reading.

Post-Reading Activities

- Collaborative Poster

A Collaborative Poster can be used to further extend the reading and the partner activity. In order to ensure that all students comprehend the essential meaning of the text, they can create collaborative posters. Each group of four students can be assigned one of the four texts (A, B, C or D). Students will create a Collaborative Poster in groups of four, using one quote, one original phrase, and one or more images to convey the essential concepts in the reading. Students will be directed to think individually on how they can represent the essential meaning of the text in a Collaborative Poster. All group members participate in creating the poster and prepare to present it to the class. Each student chooses a single color marker that will be exclusively used by this student to draw, write, and sign his/her name on the finished product. Students will view the Collaborative Poster rubric to set the expectations.

- Video Viewing Graphic Organizer

In order to support ELLs in completing the video viewing graphic organizer, the teacher may include the following:

1. Video watching: if available, ELLs can view the videos with closed captioning in English or in their native languages
2. Mini-lesson: Jargon and registers¹
3. Interacting with Video: Compare/Contrast Chart

- Compare/Contrast Chart

Compare/Contrast Charts are effective for ELLs because they help highlight central notions. Students complete a group chart listing advantages of presenting information via video vs. nonfiction article. They can work in groups of four. Two group members will focus on a nonfiction video and two on nonfiction articles. Students should first respond to the matrix questions individually, and then, share with their partners. They will reach consensus and enter the information in the chart. The two pairs will share with the group. They may use the information in the chart for a group discussion. The teacher may provide language models for comparison and contrast (e.g., *similarity*: also, in the same way, just as, similarly; *contrast*: but, however, on the contrary).

	Nonfiction video	Nonfiction articles
What are some key features?		
What are the advantages for		

¹ Jargon refers to terminology that is specific to an activity, profession, or group; register refers to a variety of a language used for a particular purpose or in a particular social setting.

presenting information?		
-------------------------	--	--

Dramatization:

- Collaborative dialogue writing

Students will be directed to write and enact a collaborative dialogue. Students in groups of four will write and perform collaborative dialogues to decipher the mystery surrounding Richard Cory's death. Roles (e.g., Richard Cory, his best friend and business partner, his ex-wife, his butler and the people on the pavement) can be assigned or left to group members to decide. Group members will write and rehearse their parts of the scene. They will be directed to use 70% of the ideas from the text and 30% from their experience or imagination. Everybody will keep a copy of their own script. Teachers should encourage students to use props, appropriate intonation, gestures, etc. In order to set expectations and to guide performance, teachers should provide a role-playing rubric. Groups will stand up and perform in class.

Informative/Explanatory Essay Writing

- Pre-Writing Matrix

The Pre-Writing Matrix activity can be used as a jigsaw project to prepare students for the essay writing. Students can first work individually on one text in groups of four, and then share the information gathered for the piece they were working on with the other group members. Each group member will take turns sharing notes on their text until all four texts have been shared. The teacher will review students' collective responses prior to using the information gathered for the informative/explanatory essay writing.

Texts	Central Idea	What is being investigated or studied?	Who is involved?	What is the result of the investigation/study?
What is Forensic Anthropology?				
Dead Men Talking				
Identifying the Victim				
Giving Faces to the Lost				

- Informative/Explanatory Essay

ELLs need specific guidance when approaching essay writing. They need to have models that they will be able to use as guides to promote their own writing. Writing needs to be presented to students with multiple scaffolds to facilitate access to the ideas they develop, the intellectual strategies to be enhanced and/or developed, and the concrete language that is necessary to accomplish the essay writing task.

Prior to students writing a one to two page informative/explanatory essay on the topic of forensic anthropology, the following should be taught explicitly to students:

- Introduce the topic clearly and organize ideas, concepts, and information into broader categories.
- Develop the topic with relevant facts, definitions, concrete details, quotations and information.
- Use appropriate and varied transitions to create a clear and cohesive essay.
- Use precise language and specific vocabulary for the topic of forensic anthropology to inform readers and address the performance task requirements.
- Provide a concluding statement that supports and explains the information presented.



GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY

SUPPORTS FOR STUDENTS WITH DISABILITIES

GRADE 8 LITERACY: FORENSIC ANTHROPOLOGY

Instructional Supports for Students with Disabilities using UDL Guidelines

Background Information: Pre-reading/Writing Activities

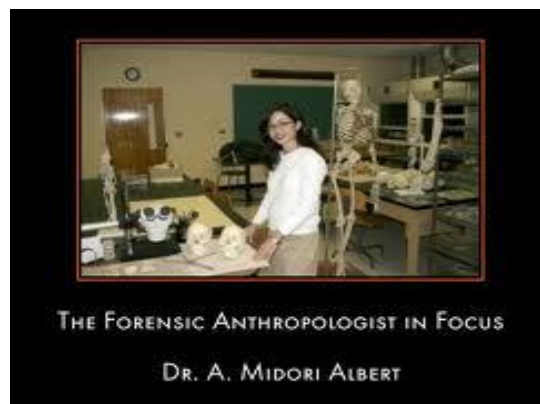
“Learners differ in the ways that they perceive and comprehend information that is presented to them. For example, those with sensory disabilities (e.g., blindness or deafness); learning disabilities (e.g., dyslexia); may require different ways of approaching content.” [from UDL Guidelines **Version 2.0, Principle I (P1)**] They may process language in different ways and at different speeds. “...Learning, and transfer of learning, occurs when multiple representations are used...” (**UDL, P1**)

Teachers need to **“activate background knowledge by utilizing frontloading activities”** Information is more accessible and likely to be assimilated by learners when it is presented in a way that primes, activates, or provides prerequisite knowledge.

Teachers can familiarize students with vocabulary and new concepts through the use of *Frontloading* strategies. These activities can be used before reading to assess student-knowledge that may be necessary for success on reading or writing tasks. Instructional activities and texts can then be monitored or revised to respond to students need.

Implementation Examples:

- Anchor instruction by linking to and activating relevant prior knowledge(e.g., using visual imagery)



- Pre-teach critical prerequisite concepts and vocabulary

Vocabulary Word	Definition
<i>Forensic Anthropology</i>	
<i>DNA</i>	
<i>Pathology</i>	

- Provide multiple means of representation (to address hearing impairments, vision impairments, receptive and expressive language delays, auditory processing, language acquisition)
- Provide Free applications for all subjects: <http://udltechtoolkit.wikispaces.com/>
- Provide an article of one of the authors read for this assignment
<http://www.cbsnews.com/stories/2002/03/13/60II/main503634.shtml>
- Provide text-to-speech capabilities <http://www.naturalreaders.com/index.htm>
- Provide an online visual dictionary <http://visual.merriam-webster.com/>

Activities to guide information processing, visualization, and manipulation:

“Successful transformation of information into useable knowledge often requires the application of mental strategies and skills for “processing” information. These cognitive, or meta-cognitive, strategies involve the selection and manipulation of information so that it can be better summarized, categorized, prioritized, contextualized and remembered.”

Implementation Examples:

- Give explicit prompts for each step in a sequential process
- Provide options for organizational methods and approaches

Assessment Task 1

In 2 paragraphs, explain literal and figurative meaning of the phrase, “**Giving Faces to the Lost**” using evidence from the chapter.

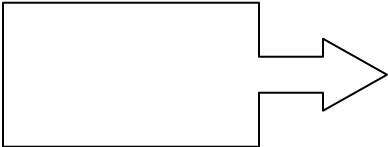
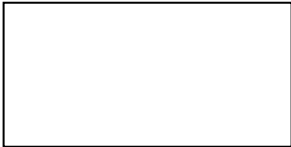
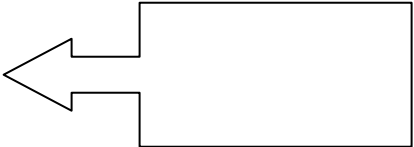
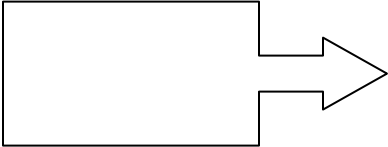

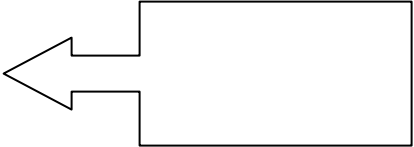
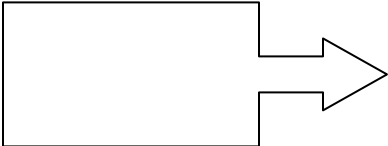
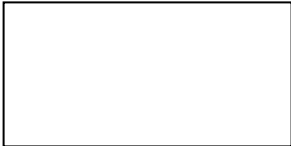
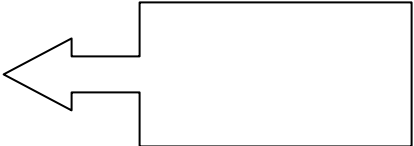
Sample Graphic Organizers that Support Task 1

Giving Faces to the Lost

Organizer 1

Literal Meaning	Evidence		Figurative Meaning	Evidence

Organizer 2

Literal Meaning	Evidence	Figurative Meaning
		
		
		

Assessment Task 2

Using evidence from 2 texts to write informative/explanatory essay

Sample Graphic Organizers that Support Task 2

Organizer 1 – Preparing to write

The Ways the Dead Tell their Tales			
<u>"Giving faces to the Lost"</u>	<u>"Dead Men Talking"</u>	<u>"Identifying the Victim"</u>	<u>"What is Forensic Anthropology?"</u>

Organizer 2 – Writing the First Draft:

Introduction <i>How do the dead tell tales?</i>	<i>Introduction strategy: (question, quote, data, anecdote, etc.)</i> <i>Thesis statement:</i>
Body <i>How do the dead tell tales?</i>	Evidence. For each manner or way you list (evidence), write the source (where the information is located). Way 1: Way 2: Way 3
Conclusion <i>How do the dead tell tales?</i>	<i>Summarize evidence.</i>

Assessment Task 3

Using textual evidence from 2 of the 4 texts read write an informative/explanatory essay in which you explain the steps you will take and the people you will consult.

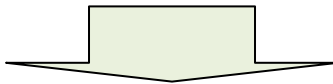
Sample Graphic Organizers that Support Task 3

Organizer – Steps Taken to Identify Body (After calling police)

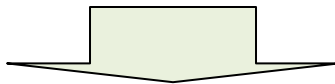
Step 1	Why	Supporting Text



Step 2	Why	Supporting Text



Step 3	Why	Supporting Text



People to Consult		
Who	Why	Supporting Text

Developing Appropriate Goal Setting

It is important that learners develop the skill of effective goal setting. The UDL framework embeds graduated scaffolds for learning to set personal goals that are both challenging and realistic.

Rubrics and checklists help learners become more strategic in using a variety of options that prompt them to “stop and think;”

Implementation Examples:

- Provide prompts and scaffolds to estimate effort, resources, and difficulty
- Provide guides and checklists for scaffolding goal-setting

❖ Sample Checklist that Supports Task 3

Did you . . . ?	
Explain three steps you will take to identify the body and your reasons why?	
Identify the people with whom you will consult and explain why you will consult them?	
Use evidence from at least two texts?	
Use transition words that clarify the relationship among steps and ideas?	
Use vocabulary forensic anthropologists would use to explain decisions?	
Write one or two page essay applying English writing conventions?	

❖ Rubric for Checking Grammar Conventions

Writer's Grammar, Mechanics, and Usage Checklist

Did I Capitalize properly?

- The first word in each sentence.
- The pronoun “I”.
- The title before a person's name.
- All proper nouns (names of particular persons, places, or things.)
- The first word in a direct quotation.
- Each important word in the title of books, movies and magazines.
- Acronyms. Example: ELA (English Language Arts)

❖ Did I Punctuate My Sentences Correctly?

- A period is written at the end of a statement or command sentence.
- A period is written at the end of an abbreviation
- A question mark is written at the end of a question sentence
- An exclamation mark is written at the end of a sentence that shows strong feeling.
- A comma is written between words in a series of three or more things.
- A comma is written before a direct quotation.
- A comma is written between the day and year in a date.
- A comma is written between the city and state.
- An apostrophe is used to show possession of something.
- An apostrophe is used for contractions.

❖ Check Word Endings – Verbs and adverbs

Check agreement

- Subject-verb
- Noun-pronoun
- Subject-verb and Noun-pronoun
- Check sentence completion

❖ Sample Checklists to Support Task:

Paragraph Writing Checklist	
Each paragraph begins with a topic sentence telling what the paragraph is about.	
Supporting sentences explain, describe, or defend your topic sentence.	
The last sentence wraps up the paragraph with a final comment about the topic discussed.	
The habit of rereading is an important practice. Edit spelling, grammar, or mechanics errors. Revise sentences for clarity, smoothness, and relevance.	

Did You...			
	Use your notes or ideas listed in the organizer to write your response?		Conclude your essay with a brief closing remark?
	Introduce essay focus?		Reread your essay and check for clarity?
	Explain the figurative meaning of text title?		Check grammar, usage, and mechanics?
	Explain the literal meaning of the text title?		Check your work using the rubric?
	Provide evidence for each meaning?		