

## Grade 8 Task Summaries

### Grade 8 Mathematics Unit

#### *Figure It Out!*

*Figure It Out!* is a mathematics unit that allows students to explore the uses of statistics in everyday life. Though a mathematics unit, *Figure It Out!* teaches students skills in the other subject areas of English language arts, science, and social studies.

#### Phase I. Learning Experiences

This unit gives students an opportunity to develop survey research skills. Students learn the basics of survey research and complete practice problems on statistics.

#### Phase II. Independent Research

To investigate a problem that is relevant to them, students design a survey and analyze survey results. Students present their findings in one of the following products:

1. A letter to a person or organization with responsibility for the problem the student studied
2. An article that summarizes the results of the research

The student's completed project will consist of various components:

- a. A cover sheet
- b. The research proposal
- c. A log, note cards, or resource process sheets
- d. Data summary
- e. The letter or article
- f. A Works Cited Page with at least ten references
- g. A videotape or audiotape of the book talk/interview, including the Q&A session
- h. A response to the student letter or article, if received

## **Grade 8 English Language Arts Unit**

### *Analyzing Awesome Authors*

*Analyzing Awesome Authors* is an English language arts unit that allows students to study an author, including his/her influences, motivations, and experiences. Students will conduct an in-depth investigation of a selected author in order to understand ways in which culture, history, and society influenced the author's style and voice.

#### Phase I. Learning Experiences

Use the following discussion questions with students:

- Have you ever read a book and wondered why the author chose to write the book or why the author wrote in the style he/she did?
- Did you ever wonder why the author chose the content he/she did?
- Who influenced the author, and what would the author's writing have been like if the author had not been in contact with that person?

#### Phase II. Independent Research

Students present their findings in one of the following products:

1. A formal research paper that illustrates what the student has learned about the motivations of and influences on the studied author
2. A rewriting of a children's story
3. A chapter of a biography of the author

The student's completed project will consist of various components:

- a. The cover sheet
- b. A research proposal, including guiding questions
- c. A research log, notes, or resource process sheets
- d. The product, including a Works Cited Page, with at least ten references
- e. Notes for the book talk/interview
- f. A videotape or audiotape of the book talk/interview, including the Q&A session

## **Grade 8 Social Studies Unit**

### *Sudden Impact*

*Sudden Impact* is a social studies unit that allows students to study influential individuals, groups, ideas, and documents from various periods of history. In this project, students will investigate provocative questions about the life of an influential contributor (or group) to history. The subject of student study must be from American history from the time of colonization to 1877. It is important to remember that this is an analysis in which students must show how a person or group impacted and influenced the rights and responsibilities of others.

#### Phase I. Learning Experiences

Use the following discussion questions with students:

- Have you ever wondered about an individual or group in American history?
- What influence did the individual or group have at the time?
- What impact did the individual or group have on your life today?
- What was their motivation?
- Who was behind them?
- How did the times in which they lived influence what they did?

Additionally, students learn how to curate a museum exhibit.

#### Phase II. Independent Research

A museum exhibit with approximately ten artifacts highlighting the impact of this person or group on American history. Students present their exhibit as a docent in a museum would, engaging other students in the content of the exhibit.

The student's completed project will consist of various components:

- a. A cover sheet
- b. The research proposal, including guiding questions
- c. A research log, note cards, or resource process sheets
- d. A list of the ten items in the exhibit and a rationale for including each of them
- e. A sketch of the exhibit with each artifact labeled
- f. A Works Cited Page with at least ten references
- g. A videotape or audiotape of the docent talk, including the Q&A session

## **Grade 8 Science Unit** ***Challenging the System***

*Challenging the System* is a science unit that allows students to explore living and non-living systems and the roles those systems play in the environment and society.

### Phase I. Learning Experiences

In groups, students analyze or create a system, such as a Rube Goldberg invention. Students discuss questions such as the following:

- What are the things you know about a system?
- Do all the parts must work together?
- What function does the system perform?
- How does the system depend on other systems?

### Phase II. Independent Research

Students present their findings in one of the following products:

1. A letter to a person or organization with responsibility for the problem.
2. An article that summarizes the results of the research.

The student's completed project will consist of various components:

- a. The cover sheet
- b. A research proposal
- c. A log, note cards, or resource process sheets
- d. A data summary
- e. The letter or article
- f. A Works Cited Page with at least ten references
- g. A videotape or audiotape of the presentation, including the Q&A session
- h. A response to the student letter or article, if received

## **Grade 8 Social Studies/English Language Arts Unit**

### *Time Travel*

*Time Travel* is a social studies/English language arts unit that allows students to explore a historical event through a piece of literature in which students conduct an in-depth investigation about the role a particular character portrayed in a historical novel. After reading the novel, students will use primary and secondary resources to verify the accuracy of the role as portrayed in the fictional account.

#### **Phase I. Learning Experiences**

What was it like to live in another time? Students read a selection from an historical novel or short story and investigate a character in-depth, describing the character and his/her role in relation to events of the time. What were the character's attributes? How would the person (or people) in that role be likely to impact society at that time or in the future?

#### **Phase II. Independent Research**

Students present their findings in one of the following products:

1. A formal essay. The student should respond to the following questions using the primary and secondary resources to support his/her position: After examining your character's actions and motivations, do you support your character's actions, or would you have done things differently? Why or why not?
2. A rewrite of a chapter or portion of the novel.

The student's completed project will consist of various components:

- a. A cover sheet
- b. The research proposal, including guiding questions
- c. A research log, note cards, or resource process sheets
- d. The essay or rewrite of a chapter or portion of the novel
- e. A Works Cited Page with at least ten references
- f. A videotape or audiotape of the docent talk, including the Q&A session

## **Grade 8 Open-ended Unit**

### *The World Is Yours!*

In this task, teachers provide TEKS connections and learning experiences. Additionally, teachers and students should work together to ensure that the research process, final product, and oral communication are designed to provide students with the breadth and depth necessary to demonstrate the dimensions assessed in the scoring guide.

The student's completed project will consist of various components:

- a. The cover sheet
- b. A research proposal, including guiding questions
- c. A research log, notes, or resources process sheets
- d. The product
- e. A Works Cited Page with at least ten references
- f. Notes for the presentation
- g. A videotape or audiotape of the oral presentation, of no more than fifteen minutes, including the Q&A session