

## 7th Grade Resources needed for JCESC Curriculum

ELA

### COURSE OVERVIEW



The student will complete all the content standards and indicators required for ENG\_LA170. These include acquisition of vocabulary, writing conventions, reading applications, writing processes, and comprehension strategies including summarizing and making predictions.

The student will be responsible to obtain copies of the following books:

- + Sounder by William H. Armstrong
- + The Westing Game by Ellen Raskin
- + Call It Courage by Armstrong Sperry

All three books are Newberry Award Books. The student will be required to read these books, write several papers including a research paper, and present a variety of speeches.

**The student will also need to obtain a copy of the movie Sounder.**

## **ENG\_LA170: ENG\_LA 170**

You may purchase these books, or you may borrow them from your local library or school district.

### **Unit 01: Dictionary Skills, Comprehension Strategies, Prewriting**

*Souder* by William H. Armstrong

### **Unit 12: Revising**

*The Westing Game* by Ellen Raskin

### **Unit 21: Clauses**

*Call It Courage* by Armstrong Sperry

### **Unit 30: Word Origins & Visual Media**

*Souder* (movie)

## **Math**

### **Course Overview**

In this course, students determine the appropriate form of rational numbers to solve problems using a variety of strategies to reason, estimate, compute, solve, and explain solutions of problems; develop and analyze algorithms for computing with percents and integers; extend their knowledge of the real number system by demonstrating an understanding of rational and irrational numbers, exponents, scientific notation of large numbers, absolute value, and square roots; and apply appropriate techniques and strategies to select, measure, and convert units of length, area, volume, and derived units. In geometry, students develop formulas for finding area and volume of plane and solid figures, distinguishing the difference between surface area and volume; define, describe, and draw attributes and properties of plane figures; plot locations in a coordinate plane; identify line and rotational symmetry, perform transformations of plane figures, and draw representations of three-dimensional figures from different views. Students use models to engage in equation-solving processes using inverse operations; graph linear equations and inequalities; use formulas to solve problems; read, create, and interpret graphs including box and whisker plots and stem-and-leaf plots; analyze data using the measures of center and spread; identify the misuses and influence of misrepresentations of data; compute

probability of compound events; and design and conduct experiments to test theoretical probabilities, make predictions, and evaluate the actual outcomes.

- No additional materials needed other than scratch paper and pencils

## **Social Studies**

### Course Overview

In this course, students begin with a study of the ancient world. This study incorporates each of the seven standards into the chronology. Students learn that each historic event is shaped by its geographic setting, culture of the people, economic conditions, governmental decisions and citizen action. Students also expand their command of social studies skills and methods.

\*no additional resources needed

## **Science**

### Course Overview

Students learn to describe interactions of matter and energy throughout the lithosphere, hydrosphere and atmosphere. They continue to develop skills of scientific inquiry, explain how matter can change forms and describe how energy is potential or kinetic and takes many forms. Students apply math skills to evaluate and analyze variables and data from investigations as they draw conclusions from scientific evidence. Students will recognize that technology can create environmental and economic conflicts, affect the quality of life, and that science and technology cannot answer all questions and cannot solve all human problems. Students access knowledge to explain how energy entering the ecosystems, such as sunlight, supports the life of organisms through photosynthesis and the transfer of energy through the interactions of organisms and the environment.

### [Required Materials for Science 170](#)

Click on the **Britannica Online** button in the course description to explore and learn the correct pronunciation of the eight animal phyla discussed in this unit

You will need the username and password provided below to access Britannica Online.

USERNAME: vla

PASSWORD: student

## **Required Course Materials List**

### **SCI170: SCIENCE 170**

#### **Unit 23: You Build It!**

Various household items based on a selected project

Project 1: Renewable Energy House –shoe box or other similar cardboard box, common everyday materials straws, aluminum foil, plastic wrap, stones, etc.

Project 2: Design a Food Web - shoe box or similar container

Purchase models for organisms or create your own

Common household items

Project 3: Homemade Flashlight –cardboard tubes, foil, paperclips, nails, etc

May use a commercial flashlight bulb and standard batteries

Project 4: Design a Robot –disposable plastic containers, corks, straws, etc.

Project 5: Model of Nuclear Power Plant - household items, such as disposable containers, straws, foil, plastic wrap, etc.