
THE EMPIRE STATE BUILDING

EDUCATION MATERIALS

SOCIAL STUDIES:
GRADES 9-12



Exploring The Laborers Who Built The Empire State Building

OVERVIEW OF LESSON PLAN

In this lesson, students will learn about many types of workers needed for the construction of the Empire State Building. Through research and discussion, students will understand not only what a colossal feat it was to build the world's tallest structure in record time (only thirteen months), but also the extraordinary commitment of the people who built it.

SUGGESTED TIME ALLOWANCE

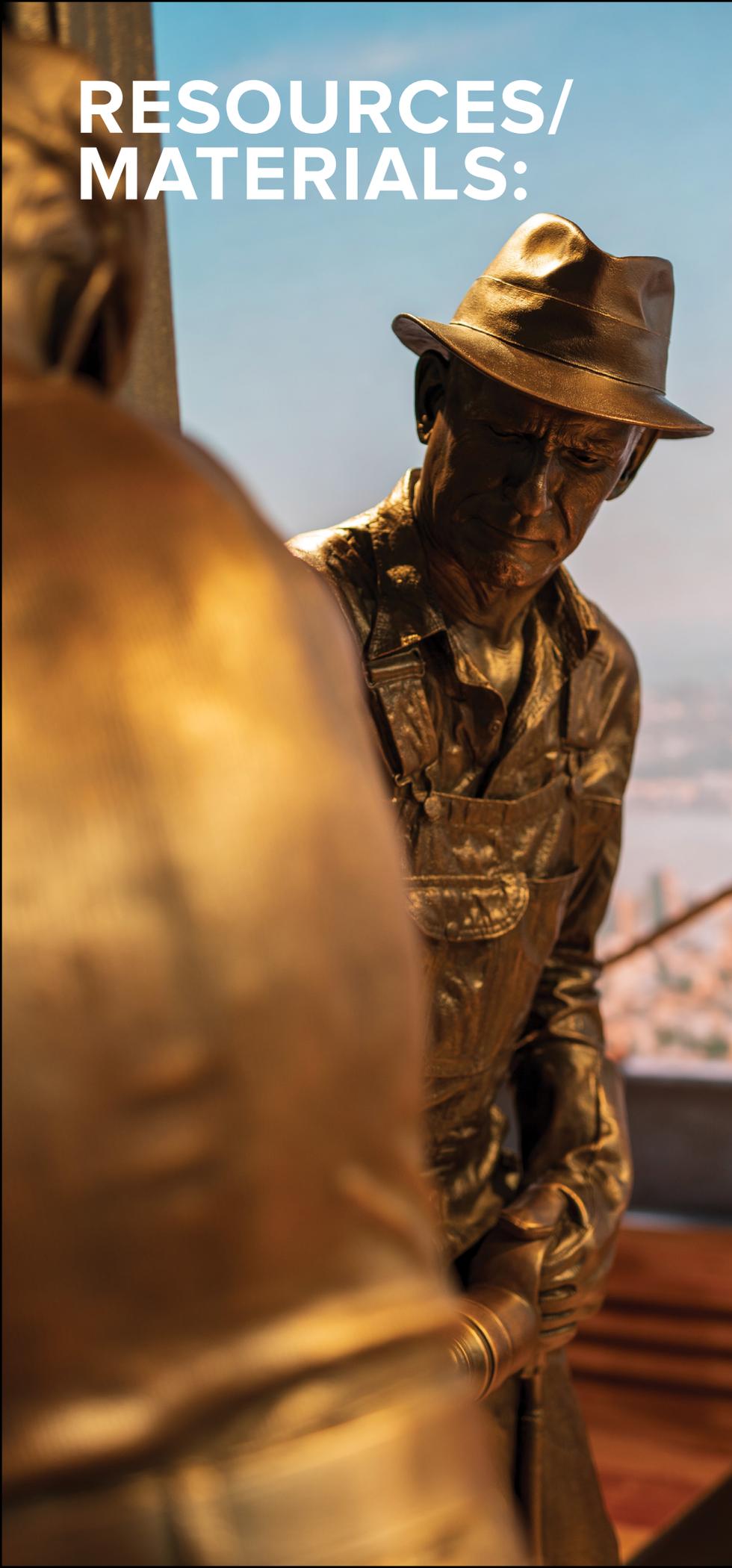
1 hour

OBJECTIVES

Students will:

- Contemplate the risks involved with building a skyscraper.
- Learn about the many different kinds of workers needed for such an immense project.
- Research job titles and the responsibilities of those workers.
- Create baseball cards for original workers of the Empire State Building.

RESOURCES/ MATERIALS:



- Student journals
- Pens/pencils
- Paper
- Classroom board
- Resources on the Empire State Building, including history textbooks, encyclopedias, computers with Internet access, etc.
- Copies of early photographs of workers on the Empire State Building
- Copies of the August 14, 1930 job list of employees present during construction of the Empire State Building
- Copies of baseball cards of various formats; for examples of baseball card layouts, try a simple Google Image search for “Baseball Card”

ACTIVITIES/ PROCEDURES:

WARM-UP/DO-NOW:

Prior to class, print out and display these photographs of workers on the Empire State Building. Ask students to choose one of the photographs and allow five minutes for them to respond to the following in their journals: “The four photographs in front of you depict laborers working on what was to be the tallest building in the world, the Empire State Building. Create a caption that summarizes what you see in the photograph you have chosen. Then write what you think it must have been like to work under the conditions depicted here. Why would workers risk their lives to work under these conditions?” After students have written in their journals, call on several of them to share their thoughts with the class. Record all descriptive words on the board. Urge students to consider what living and working conditions must have been like during the Great Depression when the Empire State Building was being constructed.

Have the class discuss the following, recording class members’ responses on the board: “What types of jobs are needed to build a skyscraper?” After a few minutes, hand out the August 14 list of jobs. Read through the job titles, noting ones the class suggested (including those which fit under different titles), as well as those that were not suggested.

Divide the class into five groups. Each group will be assigned one of the following professions:

- Ironworker
- Mason
- Carpenter
- Electrician
- Plumber

The groups are to research the answers to the following:

1. In what type of work does your group of laborers specialize? Find a working definition.
2. During the construction of the Empire State Building, what specific tasks did your group of laborers perform?
3. How many members of your profession were employed during the thirteen months of the building’s construction?
4. Find statistics to display the amount of work your profession contributed to the building’s design (for example, “How many miles of cable were installed?” Or, “How many bricks were laid?”)
5. Was there a dominant ethnic group in this field?
6. If possible, find a photograph displaying a member of your assigned profession working on the Empire State Building, or one that displays the outcome of that profession’s work (this will be more challenging for some groups, such as the plumbers).

ACTIVITIES/ PROCEDURES:

WRAP-UP/HOMEWORK:

For homework, have students use the notes they gathered in class to create a baseball-style card for a worker on the Empire State Building. Each card should include a photograph, the worker's name, job title, description of the job, statistics, and any biographical information students wish to add (country of origin, size of family, age, etc.). The workers' names do not have to be the actual names of those who built the building, but should reflect the ethnicities and sounds of those who might have been employed on the Empire State Building. The statistics must come from actual statistics about the building's construction and design (For example: "Charlie Andreasen and his 4-member rivet crew secured 40 rivets/minute, earning \$.15/day.")

FURTHER QUESTIONS FOR DISCUSSION:

What effect do you think the Great Depression had on the speed and the cost of constructing the Empire State Building?

In what ways did the project managers encourage speedy work with limited breaks?

Would you want to live or work in a skyscraper? Why or why not?

EVALUATION/ASSESSMENT:

Students will be evaluated based on participation in the initial exercises, active participation in group research and reporting, and creation of baseball-style cards celebrating workers of the Empire State Building.

EXTENSION ACTIVITIES:

Using your knowledge of the amount and type of labor needed, hours worked, and working conditions, create a Help Wanted announcement that seeks workers to build the Empire State Building.

Write a one-page paper on methods used in constructing the Empire State Building that allowed the building to rise in record time (for example, utilizing elevators from the demolished Waldorf-Astoria, or installing a railway system, etc.).

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VOCABULARY:

GLOSSARY

Architect n. a person skilled in the art of building; a building designer.

Beam n. one of the principal horizontal timbers of a building that supports or helps support a load, such as, for instance, the floor above it, or a roof.

Concrete n. a mixture (often of gravel, pebbles, or broken stone with cement or with tar, etc.) used to create sidewalks, roadways, building foundations, flooring, etc.

Derrick n. a machine used for raising and lowering heavy weights and, while holding them suspended, transporting them a limited distance to a designated location.

Erect v. to put up a building or other structure.

Hoist v. to raise or lift, usually by using some kind of machinery.

Immigrant n. a person who leaves one country to settle permanently in another.

Mason n. a person whose occupation is to build with stone or brick; also, someone who prepares stone to be used for building purposes.

Mullion n. a slender bar (pier) which divides the lights (or panes) of windows, screens, etc. On the Empire State Building, these are the vertical, chrome-nickel steel rails that divide each pair of windows and are capped with floral designs.

Rivet n. a metallic pin with a head, used for uniting two plates or pieces of material.

Skyscraper n. a very tall building.

Spandrel n. the triangular space between the curve of an arch and the inclosing right angle; or the space between the outer moldings of two adjoining arches and a horizontal line above them. On the Empire State Building, the spandrels used were aluminum--a rust-resistant material.

Story n. any of the different floors or levels in a building.



ACADEMIC CONTENT STANDARDS:

This lesson plan may be used to address the McREL academic standards listed below. These standards are drawn from “Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education: 3rd and 4th Editions” and have been provided courtesy of the Mid-Century Research for Education and Learning in Aurora, Colorado.

Behavioral Studies: Level IV (Grades 9-12)

Standard 1. Understands that group and cultural influences contribute to human development, identity, and behavior

Benchmark 7. Understands that family, gender, ethnicity, nationality, institutional affiliations, socioeconomic status, and other group and cultural influences contribute to the shaping of a person’s identity

Standard 2. Understands various meanings of social group, general implications of group membership, and different ways that groups function

Benchmark 1. Understands that while a group may act, hold beliefs, and/or present itself as a cohesive whole, individual members may hold widely varying beliefs, so the behavior of a group may not be predictable from an understanding of each of its members

Benchmark 2. Understands that social organizations may serve business, political, or social purposes beyond those for which they officially exist, including unstated ones such as excluding certain categories of people from activities

Benchmark 3. Understands how the diverse elements that contribute to the development and transmission of culture (e.g., language, literature, the arts, traditions, beliefs, values, behavior patterns) function as an integrated whole

Benchmark 4. Understands that groups have patterns for preserving and transmitting culture even as they adapt to environmental and/or social change

Benchmark 5. Understands that social groups may have patterns of behavior, values, beliefs, and attitudes that can help or hinder cross-cultural understanding