

Inventors and Inventions

Choices—Inventors and Inventions Student Reproducible

Name _____

Planning Chart

Project	Points	Materials Needed
Project 1		
Project 2		
Project 3		
Total Points		

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Skills Summary

Social Studies

Inventors and their inventions

Literacy Skill

Gathering and recording research information

Differentiation Strategy

Choices (See page 150 for more information.)

Classroom Management Tip

Projects like these are most successful when a note is sent home with each child. This note should fully describe the activity and tell how the students are supposed to choose their assignments to prevent parents from being confused by the long list of projects.

Overview of Activity

- ▶ This project can be part of a unit of study where the students learn about famous inventors and inventions. It is intended to be a take-home project completed mostly at home with some research time given during class.
- ▶ In this activity, students are given a menu of project options. Each suggested project has a point value assigned to it. The students must earn at least 25 points. Each student gets to choose which projects to complete. This freedom of choice allows the students to complete projects according to their own ability levels and interests.
- ▶ Teachers can use this activity toward the end of the year as students have grown more independent and mature. The research students perform will provide skills necessary for doing more research in the future.

How This Strategy Benefits Students

- ▶ Menu of options benefits all students because it allows them to choose activities according to their personal learning styles and interests.
- ▶ **Above-grade-level** students enjoy making decisions about what they will learn. The menu of options tells these students that they can be trusted with their decisions.
- ▶ Giving **below-grade-level** students a choice from the wide array of projects will make them feel powerful and will result in successful projects.
- ▶ Menu of options provides flexibility for the **English language learners** who have difficulty writing. Instead, they can verbally explain their projects.

Learning Standards

- ▶ Students know the accomplishments of major scientists and inventors.
- ▶ Students use a variety of sources to gather information.

Inventors and Inventions *(cont.)*



Whole-Class Activity

1. At the beginning of a unit on inventors and inventions, give your students copies of the *Inventors and Inventions Menu of Options* (page 155). Read over all of the project choices with the students and answer any questions.
2. Give students 10 minutes to talk to their classmates and start getting ideas for their projects. Some of your below-grade-level students might enjoy working on a few of the same projects in a small group. Allow them this option, if possible.
3. During this time, you or an aide should meet with the English language learners and below-grade-level students to assist them in selecting appropriate projects. As you meet with them, you can adjust the projects to better meet their needs. For example, instead of having them write letters, have them record their letters on an audio tape so that they are not limited by their written-language abilities.
4. Give students individual copies of the *Menu of Options Planning Chart* (page 156). For homework, have the students decide which projects they would like to complete. They should record their choices and complete the rest of the *Planning Chart*. Explain to them that they can still change their minds, but you would like them to have a plan so you can help them stay on task. If students change what they are planning to do, they should let you know. This will also help as you prepare to evaluate the projects. If you know approximately what is being done, you can better manage your time for assessing the work.
5. Over the next couple of weeks, allow students time in class every few days to work on their projects. Be sure to tell them the day before you are going to give them class time so that they can bring in their projects.
6. When the projects are due, allow time for students to share them in front of the class. This would also be the time when students would have to present the oral parts of their projects, if applicable.

Inventors and Inventions *(cont.)*



Assessment

1. Student work should be evaluated based on the following components: amount of content shared, following directions, neatness, and creativity. Take these four components and assign point values to them. So, for a 20-point project, you might have the following point values: content 10–points; following directions–4 points; neatness–3 points; and creativity–3 points.
2. Then, using the assigned values, evaluate each student’s projects and give a grade. If a student goes above and beyond the assignment, you can give extra credit points.
3. If possible, display the students’ work throughout the classroom, making sure to display work from each student so that everyone feels good about what he or she created.

Name _____

Inventors and Inventions Menu of Options

Directions: Choose activities from the list to show what you have learned. Each activity has a number value. You need to earn at least 25 points total.

Projects are due: _____

Project Choices

Worth 20 points each

- ▶ Design a book cover for this inventor's biography.
- ▶ Write a letter to this inventor. Tell the inventor what you like about his or her inventions.

Worth 15 points each

- ▶ Create a WANTED poster. Include the inventor's picture, name, and a description. List what he is wanted for, when he was last seen, and a reward.
- ▶ Make a comic strip about your inventor. Create at least four scenes. Include speech bubbles, too.

Worth 10 points each

- ▶ Draw a time line. Include at least 10 important events about your inventor.
- ▶ Design an award to give to your inventor.

Worth 5 points each

- ▶ Make a paper chain with at least seven links. On each link, write a fact about the inventor.
- ▶ Make a door hanger about this inventor. Include at least one invention on it.

Name _____

Menu of Options Planning Chart

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Project 1		
Project 2		
Project 3		
Total Points		