

# Into the Poison Cloud

Meet Garrett Morgan, a brilliant inventor whose innovations saved countless lives

## About the Story

Lexile: 880L

For qualitative complexity factors, go to the Story tab.

**Learning Objective:** to apply ideas about characteristics of successful inventors to the story of Garrett Morgan

**Key Skills:** key ideas and details, character, text evidence, inference, vocabulary, synthesis

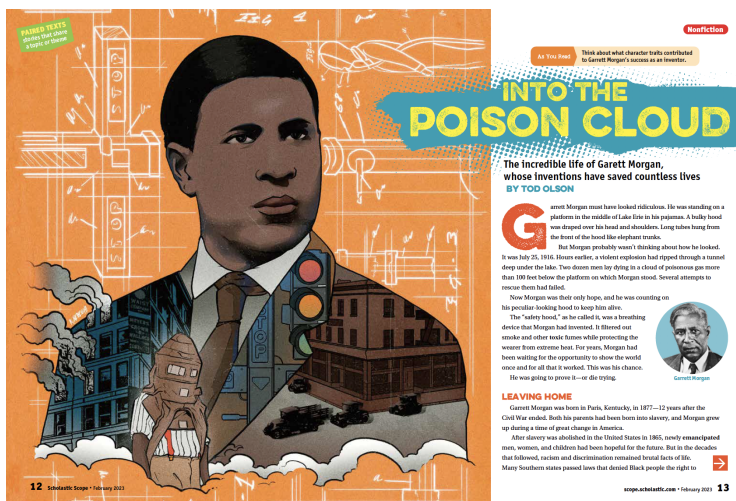
### Essential Questions:

- What drives innovation?
- How do advances in technology affect our lives?
- How can we overcome obstacles?

### Standards:

The article and lesson support these Common Core anchor standards:  
R.1, R.2, R.3, R.4, R.5, R.6, R.9, W.2, SL.1, SL.2, L.4, L.5, L.6

For more standards information—including TEKS—go to Scope Online.



## Your Teaching Support Package

Find your full suite of support materials at [scope.scholastic.com](https://scope.scholastic.com).

### Audio:

- Article read-alouds
- Text-to-speech
- Vocabulary

### Video:

- Beyond the Story: 5 Inventions That Changed the World

### Differentiated Article:

- Lower-Lexile version

### Connected readings from the Scope archives:

- Special Collection: Amazing Histories

### Skill Building Activities to print, project, or share digitally:

- Writing Planner: Garrett Morgan's Success
- Video Discussion Questions
- Vocabulary: Definitions and Practice
- Close Reading and Critical Thinking
- Choice Board
- Core Skills Workout: Text Features, Text Structure\*, Text Evidence\*
- Quiz\*
- Contest Entry Form

\*Available on two levels

# Step-by-Step Lesson

Close Reading, Critical Thinking, Skill Building

## 1. Preparing to Read

25 minutes

### Do Now: Journal and Discuss (15 minutes)

- **Journal:** Project the prompts below on your whiteboard. Have students choose one prompt to respond to in their journal.
  1. If you could invent one thing that would make your life easier or better, what would it be? Draw a picture of this invention and write a caption that describes it. Be sure to give your invention a name.
  2. What do you think is the greatest invention the world has ever seen? Why?
  3. Pick something you use every day. How would your life be different if this thing had never been invented?
  4. Look around your classroom. List five objects you see. Combine two or more of those objects to create a brand-new invention. Draw a picture of this invention and write a caption that describes it. Be sure to give your invention a name.
- **Discuss:** Have students gather into groups according to which prompt they chose to discuss their responses. Then have a member of each group share highlights from their discussion. To wrap up, ask the class what character traits they think a successful inventor needs to have. Write them on your whiteboard.

### Preview Vocabulary (10 minutes)

- Project the **Vocabulary: Definitions and Practice**. Review the definitions and complete the practice activity as a class. Highlighted words, article one: *emancipated*, *ingenious*, *menace*, *toxic*; article two: *innovative*, *invest*, *prototypes*. Optionally, print or share the interactive link directly to your LMS and have students preview the words and complete the activity before class. Audio pronunciations of the words and a read-aloud are embedded in the interactive slides.

## 2. Reading and Discussing

45 minutes

### “Into the Poison Cloud”

- Have a volunteer read the **As You Read** box that appears on page 13 of the magazine or at the top of the digital story page.
- Read the article once as a class. Optionally, have students listen to the read-aloud while they follow along. The **audio read-aloud** is located in the Resources tab in Teacher View and at the top of the story page in Student View.
- Divide students into groups to read the article again and respond to the following close-reading questions.

### Close-Reading Questions

(10 minutes)

*The following questions can be shared in printable or interactive form.*

1. **In the section “Leaving Home,” Tod Olson writes that Morgan had the gift of “insatiable curiosity.” How does Olson develop this idea throughout the article?** (key ideas and details, character) *Olson develops the idea of Morgan’s curiosity when he explains that Morgan liked to take things apart and put them back together to see how they worked. Olson further develops the idea when he explains that Morgan taught himself to repair the sewing machines at a factory in Cleveland where he worked. The information that Morgan invented a fire safety hood—which he later adapted for use as a gas mask for troops fighting in World War I—and a traffic signal also develops the idea. In addition, Olson states that Morgan kept a giant stack of National Geographic magazines and hired tutors for himself.*
2. **Olson calls Morgan’s safety hood “an invention the world desperately needed.” How is this statement supported?** (key ideas and details) *Olson supports his statement that Morgan’s gas mask was “desperately needed” by explaining that at the time, firefighters had no way of protecting themselves from smoke and fumes and would suffocate trying to rescue people. The caption “What he did: Protected Firefighters” also supports the statement with an example of how deadly fires could be in cities in the early 1900s, explaining that 146 people died in the Triangle Waist Company factory fire.*
3. **How effective did the men gathered on the platform in Lake Erie think Morgan’s safety hood would be? How do you know?** (text evidence, inference) *It is clear that the men on the platform had little faith that Morgan’s safety hood would be effective. The detail that the mayor shook Morgan’s hand and “said simply, ‘Goodbye,’ as though he did not expect to see Morgan*

again” and the detail that only three people volunteered to enter the tunnel with Morgan show what little confidence they had in Morgan’s device.

### “6 Qualities of a Successful Inventor”

- Read the article as a class or independently. Optionally, have students listen to the read-aloud while they follow along. The **audio read-aloud** is located in the Resources tab in Teacher View and at the top of the story page in Student View. Then have students answer the following close-reading question.

#### Close-Reading Question

(5 minutes)

*The following question can be shared in printable or interactive form.*

1. **Based on what box No. 3 says, define *resilience* in your own words. How did Morgan show resilience?** (vocabulary, synthesis) *Resilience is the capacity to recover quickly from difficulties; toughness. Morgan showed resilience by continuing to educate himself after he was forced to quit school at the end of sixth grade. Facing racism and discrimination in Kentucky, he showed resilience again by moving to Ohio in search of opportunities. Then, when he faced racism and discrimination again when trying to sell his safety hood, Morgan did not give up but instead hired White salesmen to demonstrate his product all over the country.*
- As a class, discuss the following critical-thinking questions, the second of which applies to both articles.

#### Critical-Thinking Questions

(5 minutes)

*The following questions can be shared in printable or interactive form.*

1. **Consider the saying “Necessity is the mother of invention.” What does it mean? How does it apply to the story of Garrett Morgan?** *This saying means that new ideas or ways of doing things are created when there is a problem that needs to be solved. Morgan saw many problems that inspired him to create solutions. For example, he saw a need for better protection for firefighters and also for increased safety for drivers and pedestrians, and in response, he created two lifesaving devices: a safety hood and a new traffic signal.*
2. **What might be rewarding about being an inventor? What might be challenging?** *Ideas for what might be rewarding: the excitement of starting something new, the satisfaction of seeing your ideas come to life, being your own boss, having a creative and interesting job, the possibility of becoming rich and/or famous, and the opportunity to make a real and important difference in the world. Ideas for what might be challenging: you risk losing a lot of money, you might face a lot*

*of rejection, your job might take over your life, it's your responsibility to fix anything that goes wrong, and there aren't any guarantees for success.*

- As a class, revisit the list of traits of a successful inventor that students named before reading. How does it compare to the list in “6 Qualities of a Successful Inventor”?

### 3. Skill Building and Writing

20 minutes

- Have students complete the **Writing Planner: Garrett Morgan's Success**. This activity will help them organize their ideas in preparation for the prompt on page 17 in the printed magazine and at the bottom of the digital story page.
- Alternatively, have students choose a culminating task from the **Choice Board**, a menu of differentiated activities.

### 4. Keep the Learning Going

#### Watch a Video

- Watch the **Beyond the Story video**, which highlights five inventions that changed the world. Have students respond to the **Video Discussion Questions** (available in your Resources tab) in small groups or as a class.

#### Design a Solution

In “Into the Poison Cloud,” you learned how Garrett Morgan noticed problems around him and got to work trying to fix them. What problems do you see around you that might be fixed with a new invention? In this activity, think like an inventor to come up with a solution to a tricky problem.

- First, make a list of problems you'd like to solve. To do this, observe the world around you for one day and take notes in a notebook when you notice a problem. You could jot down things as simple as “the line at the cafeteria is too long” or “my sneakers get wet when it rains.”
- Then, pick one problem that might be solved with the creation of something new—a gadget, an app, or a new feature added to something that already exists (as Morgan did with the traffic signal).
- Describe the solution. How is it designed? What materials are needed? Who will use it, and how? You can include an illustration with your description, make a model, or build a prototype of your invention.



### Research an Invention/Inventor

In the articles and video, you met many inventors and inventions past and present. Choose one of the research paths below to keep the learning going:

- Choose an invention/inventor mentioned in the video or the second article to research further. Write an article about that invention/inventor.
- Research an invention NOT mentioned in the articles or video. Who invented it? What problem did this invention solve? In what ways has it changed people's lives? Present your findings in a slideshow.

Connected readings from the *Scope* archives about innovation and inventions:

[Special Collection: Amazing Histories](#)