

## Lesson: Cyber Bully

### Lesson Topic: Photography Then and Now

# Photography Then and Now

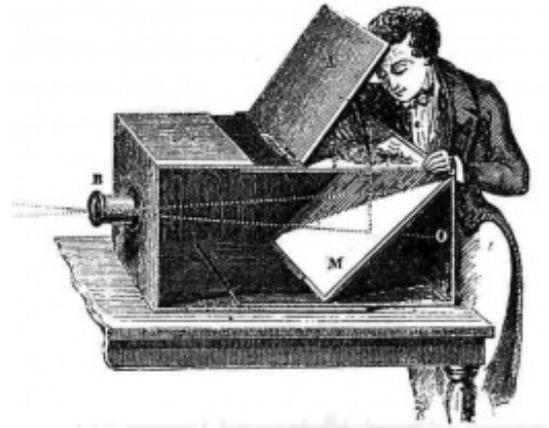
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Human beings have always wanted to have a record of themselves and their history. Moments of great importance have been recorded through art by master painters and sculptors. Sculptures and paintings are limited by the artist's ability to represent the world and do not always give us a truthful representation of what the human eye sees. Until photography, there was no way to show someone else exactly what you saw.

- Michelangelo was an Italian artist and sculptor in the 1500s who created many famous works, such as *David*.

The basic principle behind what became a modern camera was known for hundreds of years in the **camera obscura**. The camera obscura is a darkened room or tent with a small hole in the wall which allowed the image of the outside world to be projected onto the wall, cloth, or paper. It was used by artists to sketch objects quickly and accurately. Historians have traced the origins of the camera obscura to China between the years 470 and 390 BCE.



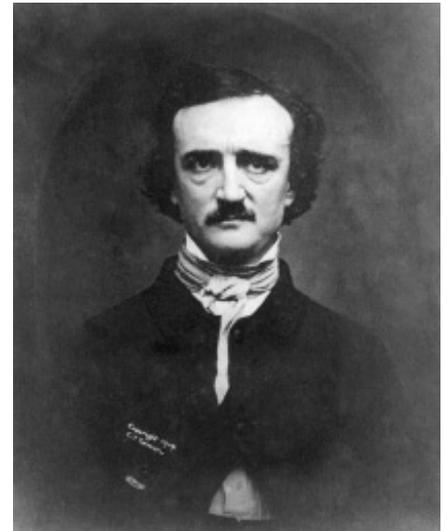
□ This drawing shows an artist using a *camera obscura* to trace a picture of something outside the box.

Eventually, a portable camera obscura was built with a small hole in the front, allowing artists to draw a wider range of objects. It wasn't until the middle of the 19th century, when light sensitive materials became available, that the images artists would normally draw were projected onto pieces of glass, paper, metal, or film and developed into photographs.

The technology behind the camera obscura is naturally occurring, but people needed to develop the light sensitive materials in order to take the first photographs.

In 1822 French inventor Nicéphore Niépce made the first photograph using a crude mixture of chemicals. The resulting image was not very clear and was not permanent.

In 1839 Niépce's partner Louis Daguerre improved the process and invented the daguerreotype. Even though the daguerreotype process involved treating metal plates with toxic fumes, people were willing to risk breathing in the fumes since the resulting photographs were clear and permanent. Daguerreotypes made a huge impact on the world and for the first time, portrait studios opened up in huge numbers.



□ Right before he died in 1848, this daguerrotype was taken of famous writer Edgar Allan Poe.

A huge leap forward in photography happened in 1885 when George Eastman invented roll film. Before this, photographers were limited to using very large, fragile glass plate negatives, and most people could not afford photography equipment. Eastman's invention made film and cameras smaller and inexpensive. Ordinary people could become amateur photographers and share their photographs.



□ George Eastman holds a Kodak #2 Camera on the S.S. *Gallia* in 1890.

Color photographs have been made since the 1860s, but they were not widespread for many years. At first, the process involved taking three black and white photographs: one through a red, a green, and a blue filter, and overlaid to make a color image. It was very expensive and time consuming. Color film was introduced in the 1930s but didn't become common until the 1960s and 1970s when it was easier to use, process, and develop.



□ This image of a tartan ribbon taken by Thomas Sutton in 1861 is considered to be the first color photograph.

Today, specialized equipment and chemicals are not longer needed to take a photograph. Digital cameras are available and built in to lots of electronics. You can send your photo all over the world in just a few seconds when you upload it on the Internet. Photographic technology has made huge leaps forward since the days of the camera obscura. You could even say that the technology seems to have accelerated in a flash!



□ Modern technology allows photographers to take clear, beautiful pictures and share them immediately with the world, such as this image of Venice, Italy, at night.

### Question 1:

According to the article, what is the biggest difference between photographs and works of art such as sculptures or paintings?

- Photographs can record important sounds.
- Photographs can record important moments.
- Photographs can show what the eye has seen.
- Photographs can show what something resembles.

### Question 2:

What is the main idea of this text?

- Today you can send your photo all over the world in just a few seconds when you upload it on the Internet.
- The first *camera obscura*, used by artists to sketch objects, was a small hole in one wall of a dark room.
- Capturing images has evolved from sculptures and paintings to modern-day cameras and online sharing.
- The Kodak camera, the first camera designed for roll film, made photography accessible to most people.

**Question 3:**

What is the connection between the daguerreotype image and photography?

- The daguerreotype image popularized photography and made owning a camera more affordable.
- The daguerreotype image made photography studios less profitable but more accessible.
- The daguerreotype image popularized photography and made it accessible to more people.
- The daguerreotype image allowed artists to sketch photographs more quickly.

**Question 4:**

Read the passage below.

*George Eastman invented the Kodak camera. It was the first camera designed for roll film. This was easier to use and much more affordable. Now ordinary people could become **amateur** photographers, and their photographs could be shared.*

What does the word **amateur** mean?

- enthusiastic
- unimaginative
- full-time
- nonprofessional

**Question 5:**

Read the passages below.

**Passage 1**

*The first camera obscura was a small hole in one wall of a darkened room or tent. Light passing through the hole formed an image of the outside scene. The projected image was somewhat fuzzy and upside down.*

**Passage 2**

*Today all you have to do is point your phone and you can take a photograph. You can send your photo all over the world in just a few seconds when you upload it on the Internet.*

How is the organization of these passages alike or different?

- They both describe events in that have not occurred yet.
- They both describe the steps in a process.
- Passage one describes a problem and solution, while passage two lists steps in a process.
- Passage one discusses the past, while passage two focuses on the present.

**Question 6:**

How is the use of camera technology presented differently in "Cyber Bully" than it is in this article?

- The story shows the harm that modern camera technology can do if used to hurt others, while the article does not.
- The story shows how easy it is to point, click, and upload a picture of someone, while the article does not.
- The article only mentions the drawbacks of modern cameras, while the story is more objective.
- The story shows both the benefits and drawbacks to modern camera technology, while the article only discusses benefits.

**Question 7:**

What source would tell you exactly when specific types of cameras were invented?

- an encyclopedia entry on the *camera obscura*
- a timeline of the evolution of cameras
- a diagram showing the parts of the first Kodak camera
- pictures of several types of cameras

**Question 8:**

The author makes the claim that humans have always wanted to have a record of themselves and their history. What details from the article best support this claim?

Check all that are true.

- In 1839, many portrait studios opened as more people wanted to have photos taken.
- Events and people of great importance have been commemorated by master painters and sculptors.
- People all over the world now send photos in just a few seconds by uploading them to the Internet.
- Color photography was first introduced in 1861, but it was not widely used for many years.
- The two basic parts of what became a modern camera were known about for hundreds of years.

**Question 9:**

If you were writing a report about the first *camera obscuras*, what details from this article would you include in your notes?

***Camera Obscura***

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Check all that are true.

- paper coated with light-sensitive material
- lens later used to sharpen fuzzy image
- first photographs made huge impact on world
- light passing through hole forms image of outside
- 1400s: used to sketch objects more quickly

**Question 10:**

Using information from this article and the story "Cyber Bully," how has the development of the Internet alongside modern camera technology allowed cyber bullying to become more hurtful to victims?

- Victims of cyber bullies can record what happens and post it on social media to get even.
- The internet would not exist without the camera.
- Pictures can be taken and printed quickly using the Kodak camera.
- Embarrassing pictures can be easily snapped and uploaded at any time.