

Zoetropes

SUBJECT	TEACHER	GRADE	DATE
Film and Animation	Ms. Breese	5 th grade	9/18/20

OVERVIEW

For this lesson we will be looking at the history of film and how we can understand motion through eighteen century technology. We will be creating a zoetrope using mostly paper.

MATERIALS	Films, Videos, and PowerPoints
<ul style="list-style-type: none">• 2"x14" strip of paper• 3"x16" black strips with 1mm cut outs• Markers• Black paper plane• Tape• Pencil• Hot glue• Ruler	<ul style="list-style-type: none">• https://youtu.be/Bmuo45NR6qE• https://youtu.be/5khDGKGv088• https://youtu.be/fG6ywByMAyE

STANDARDS:

VA.5.S.3.3 Use tools, media, techniques, and processes in a safe and responsible manner.

VA.5.S.3.1 Use materials, tools, techniques, and processes to achieve expected results in two- and/or three-dimensional artworks.

VA.5.S.2.3 Visualize the end product to justify artistic choices of tools, techniques, and processes.

PROCEDURE

1. Introduce the project by asking the student when do you think the first ever video was created?
2. Write the student's guesses on the board. Tell the students if they are close to the answer
 - a. 1878
3. Have the students watch the first ever motion picture ever created.
4. Tell the students that the reason that Eadward set up the photos was because he wanted to win a bet:
 - a. Eadward was at the racetrack and was betting with his friends. He was getting tired and wanted to make the betting a little more interesting. He bet that at one point all of a horse's legs are up in the air at one time. His friends did not believe that this could be true. So, they bet \$20,000 that the horse's legs cannot be up in the air. After looking at his photos, do you think that he won his bet?
5. Show the students an example of how kids would watch "videos".
6. A zoetrope is a device that kids in the 1800's would play with to see objects in motion. Kids would trade their zoetrope strips with each other.
7. Show the students the video of Pixar's Zoetrope. Tell the students that this is an example of how Pixar created a 3D modern Zoetrope.

Building the Zoetrope

1. Step 1: Have the students think of an object in motion. Play the video of original Zoetrope strips. Let the students know that the reason that the pictures are black and red mostly is because those are the darkest colors that you can see through a zoetrope.
2. Step 2: Pass out the 2"x14" strip and measure out 1 inch boxes. Use a ruler to draw perfectly straight lines.

3. Step 3: Draw what your object looks like when it starts in the first box. Draw the last box of what your object will look like at the end of the motion. Have the student show their zoetrope and once you have checked them off, they can fill in the remaining boxes.
4. Step 4: Once the students have finished drawing all of their boxes, they may use markers to fill in their drawings.
5. Step 5: Glue your drawing to the far side of your black zoetrope sheet.
6. Step 6: Tape the black zoetrope together and connect you color sheet so that the ends touch
7. Step 7: Next, create a small hole in the center of a plate. Place a pencil through the hole and hot glue the pencil to the plate. **Make sure that the pencil is perfectly straight, or your plate will be crooked.**
8. Step 8: Flip your zoetrope upside and place three strips of tape around the edge. Attach your zoetrope to the plate. Once the plate is attach, the student can start spinning it and watch their drawings come to life.