



FLIP BOOK – Animation, Wordless Storytelling

Students explore apparent motion by using marker drawings to create a flip book that animates a simple, wordless story.

Required Time

150 Minutes

Grade Level

Grade 4 to Grade 12

Subject

Language Arts
Science
Visual Arts
Media Literacy

Vocabulary

animation
line
stop-motion

Materials

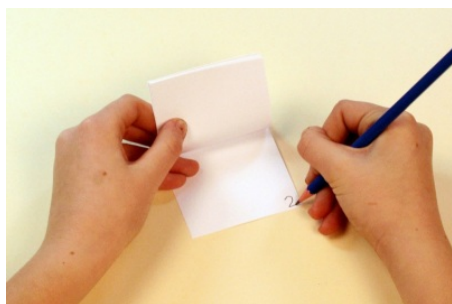
Crayola Fine Line Markers - Black

Crayola Marker & Watercolour Paper - 76 cm x 76 cm (3" x 3") - 25 pieces per student

Small Binder Clips - 1 per student

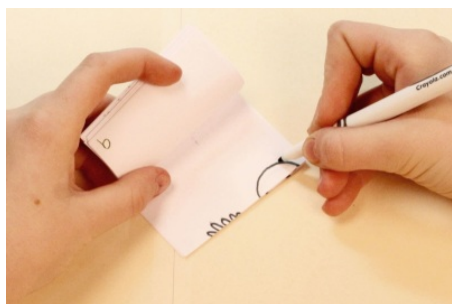
Shop Crayola
Products

Steps



Step One

1. Stack your papers into a neat pile.
2. Start at the bottom of the pile and number the back of each paper.
3. This will help you keep your drawings in order.



Step Two

1. Decide on a topic for your animation, for example, hitting a volleyball.
2. Draw your first image on the very last paper in the pile - paper #1.
3. Draw the next image on paper #2.
4. Draw it almost the same as #1, but with a slight change.
5. Remember:
 - If you draw it exactly the same there will be no motion;
 - If you draw it with a slight change there will be smooth motion; and
 - If you draw it with a big change there will be choppy motion.



Step Three

1. Continue this process while at the same time adding storytelling elements to your pages.
2. The final image of the book will be your top page.
3. Make sure all the papers are in the correct order.
4. Use a binder clip to bind the papers together.



Step Four

1. Hold the book in your hand and gently flip through the papers to see your drawings jump to life.

Learning Goals

Student will be able to:

- create a simple flip book on a minimum of 30 pages;
- create a wordless story that is easily understood;
- accurately explain how still images can be used to create the illusion of movement;
- demonstrate technical accomplishment and creativity.

Extensions

Have students:

- record each drawing from the flip book on camera and make it into a video;
- expand on the flip book idea using watercolour paints and larger paper;
- video the watercolour pages and make them into a video accompanied with digitally created music.

Prepare

1. Gather, and make available, books about animation and flip books, for example, *River of Shadows: Eadweard Muybridge and the Technological Wild West*, by Rebecca Solnit; *Muybridge's Animals in Motion CD-ROM and Book*, by Eadweard Muybridge; *Animals in Motion*, by Eadweard Muybridge; *Flipping Out: The Art of Flip Book Animation: Learn to illustrate & create your own animated flip books step by step*, by David Hurtado; and *Animated Storytelling: Simple Steps For Creating Animation and Motion Graphics*, by Liz Blazer.
2. If possible, purchase a set of flip books available at the following website:
Eadweard Muybridge Flipbooks
3. Download flip book animation examples from the Internet, for example,
Michael Jackson Variety
4. Download the first ever recorded (1887) film *Race Horse*, by Eadweard Muybridge at the following links:
Race Horse
Race Horse Frames

Introduction

1. View several flip book animation examples and discuss them paying particular attention to the repeating of the image. Guide students to notice how a simple change within the illustration creates movement within a still image.
2. Explain that 24 FPS (Frames Per Second) is the speed at which film runs, and that within that one second you will have 24 still frames that are almost identical, but with small variations, in order to move the subject forward.
3. All movies, whether they are small or large, are made up of hundreds, thousands and even millions of still frames.
4. Introduce the challenge.

Activities

The Challenge

1. Create a simple flip book on a minimum of 30 pages.
2. Create a wordless story that is easily understood.
3. Accurately explain how still images can be used to create the illusion of movement.
4. Demonstrate technical accomplishment and creativity.

The Process

1. Ensure that everyone understands the challenge.
2. Establish success criteria with your students. For example,
 - *story is easily understood*
 - *movement is smooth and steady*
 - *line is used to create simple shapes*
 - *accurately explains how still images can be used to create the illusion of movement*
 - *self-assessment sheet is fully completed with thoughtful answers*
3. Guide students through the steps outlined in this lesson plan.
4. Observe students as they work.
5. Provide individual assistance and encouragement.

Sharing

1. Once the flip books are complete ask students to share them in small groups.
Ask them to:
 - *Look closely at the flip books and how they are made.*
 - *Share thoughts about the work.*
 - *Discuss the quality of the movement.*
 - *Interpret the story.*
 - *Discuss the use of line and shape in the drawings.*

- *Tell what was satisfying about making the flip book and explain why.*
- 2. Ask some students to share something they learned about flip books with the whole class.
- 3. Have students pass all the flip books around so that each student views every book.

Assessment

1. Observe students as they work – attention to detail, transfer of knowledge from lesson to activity, collaboration with classmates
2. Observe students as they discuss their work – active listening, insightful contributions, supporting ideas with evidence found in the work and from personal experience.
3. Use checklist to track progress. (Downloads – Flipbook_tracking.pdf)
4. Have students use the self-assessment form to evaluate their work. (Downloads – Flipbook_self-assessment.pdf)