

STOP-MOTION ANIMATION – Claymation, Storytelling

Students work with modeling clay to create an animated, 30 second story using still photography and stop-motion software.

Required Time

180 Minutes

Grade Level

Kindergarten to Grade 12

Subject

Language Arts
Visual Arts
Media Literacy

Vocabulary

24fps
claymation
establishing shot
stop-motion
tripod

Materials

Clay Carving Tools (only if available)

Tripod

Digital Camera

Backdrop

Lighting

Masking Tape

Stop-Motion Software

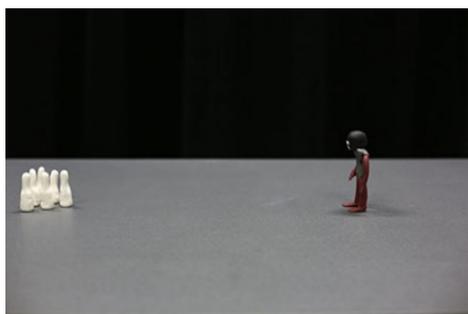
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Modeling
Clay
2lb
Jumbo
Pack

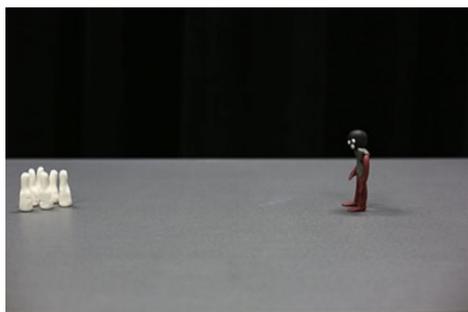
Steps

Step One



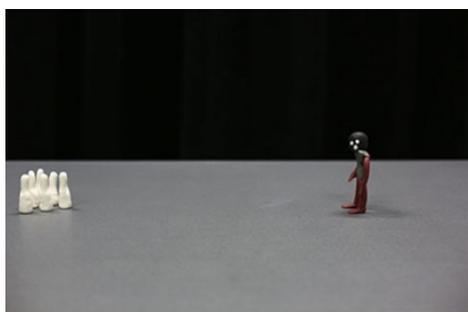
1. Set up your backdrop, tripod, camera and lighting and secure them with masking tape.
2. Place the clay figures within the background and in front of the lens.
3. Take 15 pictures of your scene without anything moving to establish where the action is taking place.
4. Next, move the figures a tiny bit and shoot two frames with the digital camera.

Step Two



1. Move the figure slightly. Remember that the smaller the movement, the smoother the motion will appear.
2. Shoot two frames with the digital camera.

Step Three



1. Repeat Step 2 moving the figure slightly each time, taking pictures, then moving the figure again as you act out the story from your storyboard.
2. You should repeat this step 720 times in order to have a final animation that is 30 seconds in length.
3. Import the still images into your editing software, for example, iMovie, iStopMotion, Windows Movie Maker.
4. Follow the steps in your software to edit your film and add music.
5. Export the film and save it.

Learning Goals

Student will be able to:

1. Correctly set up a tripod, camera and lighting to shoot stop-motion animation;
2. Create clay figures and props for a stop-motion, animated film they have written;
3. Create a 30 second, stop-motion, animated film; and
4. Demonstrate technical accomplishment and creativity.

Extensions

Have students:

1. Work in small production teams to create an animated 'How To' video demonstrating all aspects of the stop-motion process.
2. Share their videos with peers.
3. Write critiques of the final videos.

Prepare

1. Prior to the lesson you may want to have students explore clay techniques using the lessons found on this website
 - Clay Basics
 - Clay Animal
 - Clay Figures
2. Have students create a storyboard for a simple story they will animate.
3. Have students create small, clay figures and objects for their animated story.
4. View the stop-motion process videos available on the National Film Board website,
 - Three Principles of Animation
 - Production
5. Plan to video students at work throughout the project. Use the *Students at Work* video to introduce the sharing event at the end of this project.

Introduction

1. Discuss the history of animation as a class and the advancements that have occurred over time.
 - View films such as Gertie the Dinosaur, Steamboat Willie, Snow White and the Seven Dwarfs, Flintstones and To Story.
2. Explain the meaning of 24 FPS (Frames Per Second)
 - *the speed at which a film runs*
 - *within that one second there are 24 still frames that are almost identical, but with small variations in order to move the subject forward*
 - *all movies whether they are small or large are made up of hundreds, thousands and even millions of still frames*
3. Explain the 3 Step Process for making stop-motion animation.
 - *#1 create a picture, sculpture or use a model (create an image)*
 - *#2 repeat the picture and make a small change*
 - *#3 play the images back to create motion*
4. Discuss why a tripod is important for stop-motion animation and teach students how to use one properly.
 - *the camera is put on a tripod so that the frame does not move, which allows for small image changes within the frame*
 - *always attach the tripod shoe to the camera with the arrow pointing in the same direction the lens is pointing*
 - *extend the tripod using the lowest legs first.*
 - *try your best to keep the leveling bubble centered.*
5. Introduce the challenge.

Activities

The Challenge

1. Correctly set up a tripod, camera and lighting to shoot stop-motion animation.
2. Create clay figures and props for a stop-motion, animated film you have written.
3. Create a 30 second, stop-motion, animated film.
4. Demonstrate technical accomplishment and creativity.

The Process

1. Ensure that everyone understands the challenge.
2. Establish success criteria with your students. For example,
 - *animation follows the storyboard*
 - *story has a beginning, middle and end*
 - *composition creates visual interest with a dominant element*

- each frame within the 30 second sequence shows a small amount of movement creating a fluid 30 second animation
 - minimum of 240 still frames are imported
 - film has a music track
 - the exported file has the correct name and file size
 - 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 animations are complete have a movie day showcasing students' hard work.
2. Open the event with the teacher created *Students at Work* video.
3. At the end of the event have students share their impressions of the films, supporting their ideas with evidence they found in the works.

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 – StopMotion_tracking.pdf)
4. Have students use the self-assessment form to evaluate their work. (Downloads – StopMotion_self-assesement.pdf)