

How to Make a Stop Animation

1. Make sure you have a digital camera with lots of memory and a computer with either iMovie (Mac), Windows Movie Maker (PC), or another video editing software installed.
2. Think of an idea for your animation. What story are you trying to tell? How are your characters going to move? Are they going to be raising their hand, nodding, walking? Once you have a story written it helps to sketch out the actions of your characters in a storyboard.
3. Gather the figures and “props” that you want to use in your movie and to create your set. Use your imagination to find objects that will add interest to your project. Easy materials to find and use are felt, clay, wire, Legos, blocks, pennies, etc. Consider using recycled materials to keep expenses low.
4. Create a set that will complement your story.
5. Set up characters in your first planned position on the set.
6. Place your camera in front of the set. Make sure that your camera is supported in place, like on a tripod, so that it doesn’t shake or move as you take photos. If the camera moves, the result will lack the necessary continuity for a successful stop motion. Keep in mind the more photos you take the smoother the end result.
7. Set up good, steady lighting that won’t change from photo to photo.
8. Take a couple photos of the figure in the starting position.
9. Then, begin the movement sequence. The key to a successful stop motion is to move your figures with very small movements and take a photo after every movement. If your figure does not want to stay in place during movements you can use poster tack to hold the figure in place.
10. Repeat the movement sequence until your action is completed or the camera memory is full.
11. Save the photos onto your computer. This step is critical because your camera may behave like a storage drive and let you create a movie without saving the images to the computer. If this is the case, when you unplug the camera, the images will no longer be accessible to the video editing software.

12a. If you are using **Windows Essentials Movie Maker** (Windows 7 and 8)

1. Open Windows Movie Maker.
2. Click “Add videos and photos” and locate your photos.
3. Select all and click “Open.” The easiest way to “select all” is to click one and then use the Ctrl key + A shortcut.
4. The images should now be in the Windows Movie Maker timeline. By default, they are still all selected. If not, select them all again.
5. Click the “Edit” tab.
6. Change the “Duration” setting to 0.13.
7. Preview your movie by hitting the play icon on the right side of the screen.
8. Return to the “Home” tab and add a title, credits, and audio if desired.
9. Click “Save Movie” at the far right of the “Home” tab and choose whichever option is suitable. “For computer” will create an MPEG-4 and allow you to save it to your computer.

12b. If you are using **an older version of Movie Maker**

1. Open Windows Movie Maker
2. Import photos
3. Click “Tools”, then “Options”. Do this before placing the photos in the timeline.
4. Click the “Advanced” tab.
5. Under picture options, change the picture duration to 0.125 seconds a frame (the lowest setting).
6. Make sure your photos are in the correct order.
7. Load the photos into the storyboard.
8. Add titles and credits and audio if desired.
9. Go to “Finish Movie” and click whichever option is suitable.

12c. If you are using **iMovie**

1. Import your photos to iPhoto. Create an album with a specific scene/movie name and drag the pictures into it.
2. Open iMovie and click “File”, then “New Project”.
3. Choose “No theme” and click “Create New Project”
4. Click on the “Photos Browser” button at the lower right to show the photo library.
5. Choose the album you created from the drop-down menu, select all photos (click first photo, hold down shift, click last photo), and drag it into the timeline in the upper left part of the screen.
6. Click Edit, then “Select All”.
7. While all photos are selected, click “Window” and select “Cropping, Ken Burns, and Rotation”. Make sure “Fit” is selected, then click “Done”.
8. Again, while all photos are selected, click “Window” then “Clip Adjustments”. Under duration, type 0.1s and select “Apply to all stills” then click “Done”. This controls the seconds per frame.
9. Add titles, credits, and audio if desired.
10. Convert movie to QuickTime. To do this, look for the “Share” and “Export” options. Try one of the defaults.

Helpful links for Learning Stop Animation

Stop Animation How to Instructions

Step by step directions on how to make your own stop animation.

<http://www.wikihow.com/Create-a-Stop-Motion-Animation>

Engage elementary students with stop animation! From ISTE

<http://www.iste.org/explore/articledetail?articleid=128>

Examples of Educational Stop Animations

Watch a stop animation that teaches about clouds and weather.

<http://www.pbslearningmedia.org/resource/evscps.sci.life.clouds/clouds-and-weather/>

Watch a stop animation about the food chain.

<http://www.pbslearningmedia.org/resource/thnkgard.sci.ess.chain/think-garden-whats-a-food-chain/>

Watch a stop animation about healthy eating.

<http://www.pbslearningmedia.org/resource/3966366d-90dc-428b-80fd-589741788ca0/a-healthy-plate>

Examples of Early Stop Animations

J. Stuart Blackton's *Humorous Phases of Funny Faces* (1906)

<http://www.youtube.com/watch?v=wGh6maN4l2I>

Emile Cohl *Fantasmagorie* (1908)

<http://www.youtube.com/watch?v=aEAObel8yIE>

Lotte Reiniger the first women animator. This is her animation of Hansel and Gretel

<http://www.youtube.com/watch?v=KxklGXVwZTM>

Stop Motion iPad Apps

Stop Motion Studio- free

<https://itunes.apple.com/us/app/stop-motion-studio/id441651297?mt=8>

iMotion (time lapse and stop motion)-free

<https://itunes.apple.com/us/app/stop-motion-studio/id441651297?mt=8>

Pay Stop Motion Software

DragonFrame is what we use at KET and what a lot of the pros use as well.

<http://www.dragonframe.com>

Animation Planning Worksheet

Step One: Research

What is the subject?

Who is the audience?

What is the purpose of the animation?

How long should the animation be?

Step Two: Concept

Give a brief summary of the story and draw out the action using the provided storyboard.