

Online Learning - DIY: Flip Books!

2019-20 Grades

K - 12

• Harbourfront centre

When you go to the movies, it looks like you are seeing the sky, trees, buildings and people magically moving on the screen. You are actually seeing approximately 24 (or more) pictures per second. These pictures are on a film strip, and they move very quickly in front of your eyes. Your eyes see the pictures as smooth, continuous movement because of something called persistence of vision. This means that your eyes see an image and then the image goes to the brain. There is a fraction of a second delay. When your eye sees one picture after another picture very quickly, the pictures become almost layered and flow together smoothly making the pictures look like they are moving.

A flip book is a fun way to understand how pictures can appear to move. It's almost like making a mini-movie.

#### About this resource

Thanks for accessing our Online Learning resources! These step-by-step instructions will help you and your family to express their own creativity and build connections to the Ontario Arts Curriculum.

#### About us

Harbourfront Centre School Visits is an experiential, hands-on learning program that offers curriculum-focused, inquiry-based programs that explore all aspects of contemporary arts and culture. Every year, we host 26,000 students onsite for meaningful engagements with the arts. We trust you will find the step-by-step guide outlined below will allow creativity to shine through!

#### Suggested Grade Range:

Grade 1 and up

#### **Curriculum Links:**

The Arts – Visual Arts, Language

#### Key vocabulary words

- FLIP BOOK: A flip book is a series of images that gradually change from one page to another, so that when the pages are flipped rapidly, the image appears to move
- PERSISTENCE OF VISION: When
   processing images, there is a slight delay
   in what you see and how your brain
   processes the information; persistence of
   vision is what makes the image appear to
   move in a flip book.

#### Required Materials

- 2 PIECES OF 8.5" x 11" CARD PAPER (you could use 8 1/2" x 11" bond paper but light weight card paper is easier to flip) OR 12 TO 16 RECTANGULAR INDEX CARDS
- A PENCIL
- SKETCHING PAPER
- A FINE TIPPED SHARPIE
- BINDER CLIP/BULLDOG CLIP
- ACCESS TO A WINDOW

# Step-by-step instructions

## Step 1:

If you don't have index cards, step 1 will prep the paper for you. If you have pre-cut paper that is the same size, move on to Step 2.

STEP 1A

you can use 2 pieces of 8.5" x 11" card paper.

STEP 1B

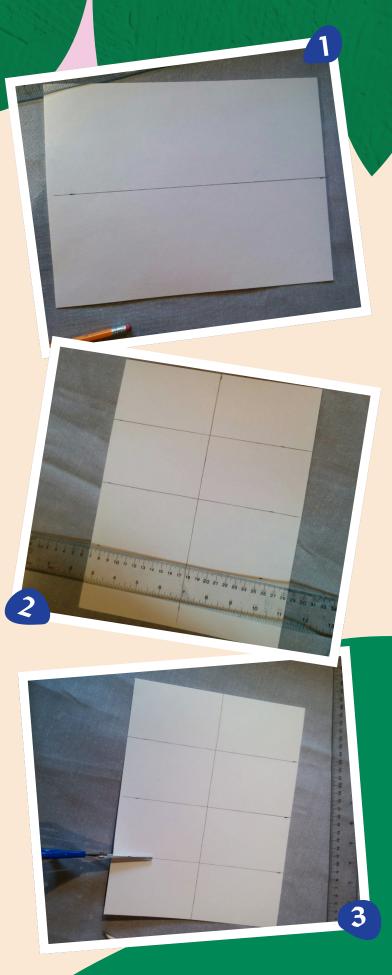
you can cut each piece into 8 equal rectangles giving you 16 rectangles. Using a ruler mark the middle (4.25") of the 8.5" side at each end of the paper. Place your ruler on the two marks and draw a line dividing the page in half. (Image 1)

STEP 1C

11"= 28cm. On the long side (28cm or 11") measure 7cm from the top and make a mark, then 14cm and then 21cm. Mark both sides of the paper. Place your ruler on the marks and draw lines. (Image 2)

STEP 1D

Carefully cut along the lines on both pieces of paper. You should have 16 rectangles. Put your rectangles in a pile and make sure all the uncut edges are on the same side. Your flip book will be easier to flip with smooth, uncut edges. (Image 3)



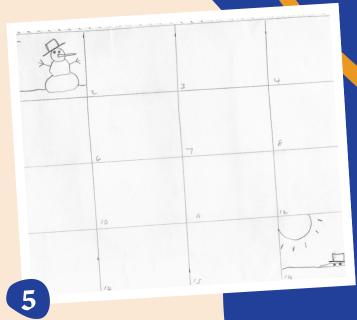
## Step 2:

It helps to plan and sketch the frames of your flip book before you draw on your card paper. On a piece of sketch paper draw 16 little rectangles. Start by dividing your page into 4 horizontal sections and 4 vertical sections. They don't have to be perfect because it is just a sketch. (Image 4)



## Step 3:

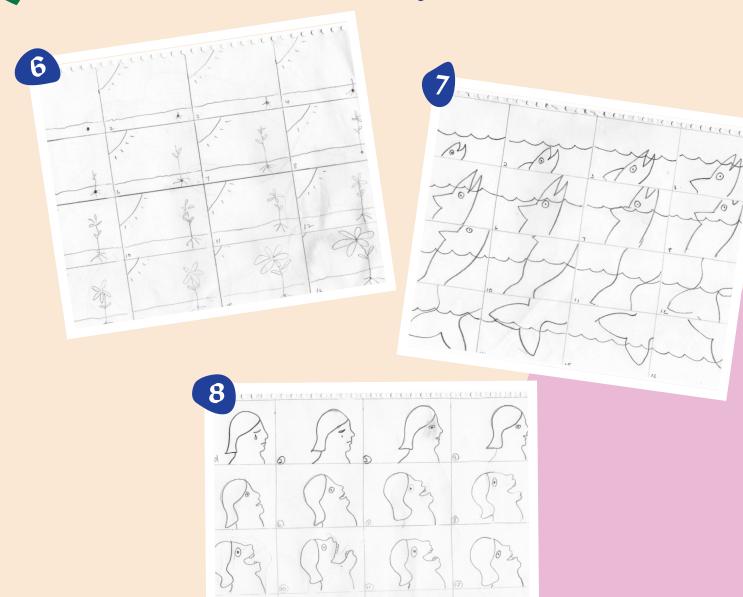
Think about your mini, moving story. You could make something rotate (a dancer), do a flip (a circus performer), melt (an ice cream cone), bounce (a ball), splash (a fish), transformation/metamorphosis (a cocoon to a butterfly), burst (a balloon). The possibilities are endless but keep your idea simple. (Image 5)





Number your boxes 1 to 16. Draw your first image in box number 1 and think about how you want your images to move and how you want your story to end. The final image is drawn in box 16. Now complete the sketch.

(Image 6, 7 and 8)



## Step 5:

The pages of this flip book are rectangular to make space for the clip on the left side and the bend in the middle, and the images are drawn on the right side. Make a small mark in the top, middle of each page to remind yourself to keep your drawing to the right of the mark. (Image 9)



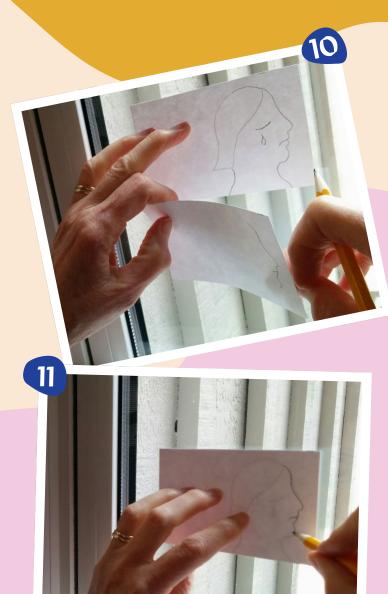
# Step 6:

Using your sketch as a reference, draw your first image on the right side of your rectangular card paper. Number each page on the bottom left side. Place your first page on a window and your second page on top. The light allows you to see through the card and makes it easier to draw the gradual changes of each page. When you have all your pages completed put them together and pat the pile to make the flip edge perfectly even. (Image 10 and 11)



Clip the left side and test your book. If there is a transition that is not smooth you can always add a page. You can add colour to your pages and a cover page with a title.

Click here to watch a flip book example!



## **Extensions:**

A Post-it Pad is a really fun, fast and easy way of making a simple flip book. Tear off about 16 pages. Keep the pages stuck together like a little book and start drawing your last image first so you are working from back to front or your last image to your first image. Your second drawing will be the second last page of the little book. When you place it over the last page you can see through the page making it easier to draw the gradual change of each image. A flip book made with Post-it Note pad is a good way to practice or understand how a flip book works. You can add colour using coloured pencils or markers, and you can make the first page the cover for your book. Include a title made with creative lettering and an image that is central to your flip book.



YouTube Video Tutorial: Making a flipbook with a Post-it pad