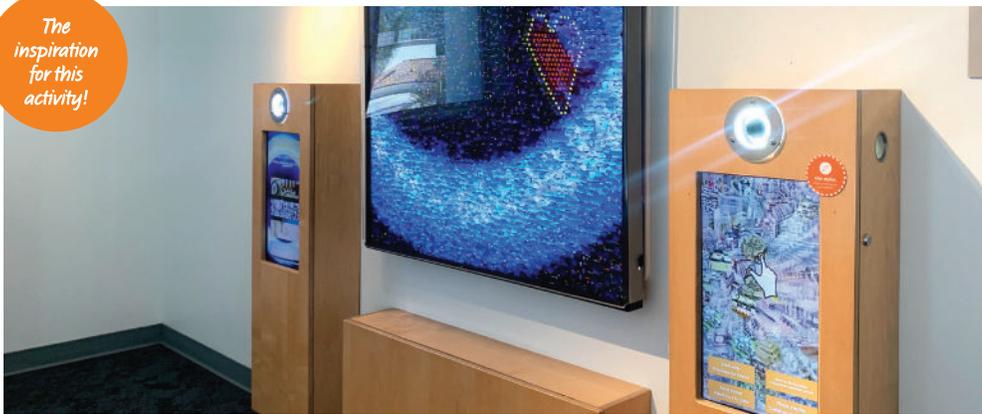


moxi at home

Pixel Mosaic.

Explore how individual pixels (small squares of individual colors) can be assembled to create a larger picture.

The inspiration for this activity!



MOXI Exhibit Connection	Mosaic Faces
Age	5+
Time	20+ min
Category	Light, Design

Educational Value

Based on Next Generation Science Standards (NGSS)

Grade	Standard
K-2	K-2-ETS1-2
3-5	3-5-ETS1-3
6+	MS-ETS1-4

*May include opportunities to employ the following Science and Engineering Practices:

- Asking questions
- Defining problems
- Designing solutions
- Obtaining, evaluating, and communicating information

↙ For Educators

Design Challenge

Create a large image made up of small squares of single colors.

Materials

Below are some ideas for supplies, but be creative! What else could you use for each of the categories below? Your home is a creative tool chest waiting to be discovered!

<i>Pixels</i>	<i>Canvas</i>	<i>Tools</i>
<ul style="list-style-type: none"> • Magazines • Newspaper • Construction paper (multiple colors) • Tissue paper 	<ul style="list-style-type: none"> • Paper • Cardboard • Fabric • Paper bags 	<ul style="list-style-type: none"> • Scissors • Glue • Pen/Marker

Thank You to Our Featured Sponsors:

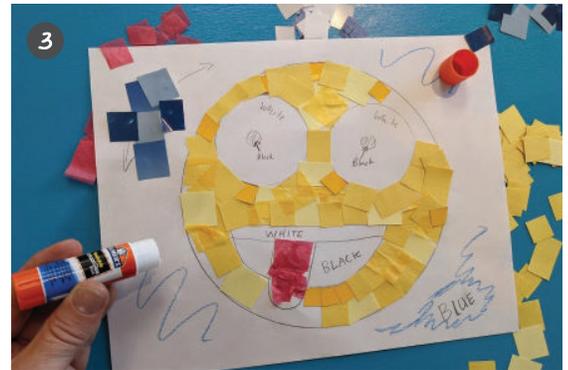
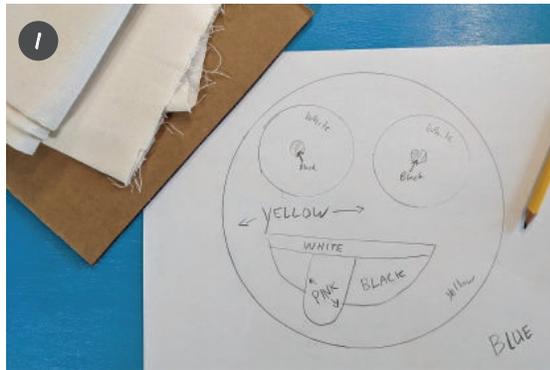
Mithun Family
Foundation



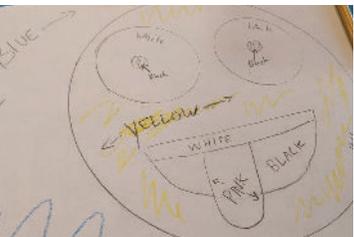
COX

Williams-Corbett
Foundation

Instructions



Write the colors you want to use on your sketch. You're going to cover them up with paper squares!



1. Pick your canvas (this is the background material that you will put your pixels on). Will you use paper, cardboard, fabric, or something else? On your canvas, make a pencil sketch of the big shapes in your design. To start, draw something simple that uses only a few colors.
2. Find colorful, cuttable materials that you can use in your pixel mosaic. Cut out small squares and sort them by color. Plan your design before cutting the paper so that you can prepare the perfect amount of material.
3. Glue squares onto your canvas in the desired shapes and patterns.
4. Take a step back and observe your mosaic. What changes do you want to make? To make your pixel picture pop, try tracing around the outline of your design with a dark marker.



Larger squares will make a more abstract image but are good for a quick project. Small squares help with detail. You might need a few different sizes for your picture.

Activity Extensions Why stop here?
Keep the MOXI fun going!

investigate How do different pixel sizes affect an image? Try creating the same image twice – once with small pixels and once with large pixels. What do you notice when you look at them from a distance? How will your observations change your future mosaics?

innovate What other materials can you use to make a pixel mosaic? Make an outdoor mosaic out of leaves and flower petals, an edible mosaic out of food, or choose your own art adventure!

ignite Go digital! Find an app or website to create digital pixel art like the characters in old video games.

Curiosity Corner What's a pixel?

The word pixel is a combination of two words – “picture” and “element.” Pixels are small, single-color pieces of a picture. If you look at your computer with a magnifying glass, you can see thousands of tiny squares of individual colors. When you zoom out, you experience a mosaic effect – the individual spots of color come together to form a picture.

Make + Share!

Be sure to share your creations and tag us [@moxisb](#) and use [#moximade](#) and [#moxiathome](#) so we can join in on the fun, share your projects, and inspire others!

