

Smithsonian in collaboration with
USA TODAY presents:

WINTER AT HOME



THIS BOOK BELONGS TO THE IMAGINATION OF: _____



Winter greetings from the Smithsonian! When I was in school, I was always looking to learn, especially when school let out for the holidays and weather began to limit outdoor activities. As you look for things to do during winter break, the Smithsonian wants to help you have fun exploring and learning in your home by tapping the power of your own imagination.

I hope you enjoy these activities, from decoding a secret message in your bathroom mirror to creating snow-themed stories based on artworks in our collections. Inspired by some of the coolest stuff the Smithsonian has to offer, it proves that even if you're stuck inside, you can have limitless fun when your creativity guides you.

Lonnie G. Bunch III
Secretary of the Smithsonian

WELCOME

Wherever you are in the United States, there are ways to get outside and explore the place you live year-round. It's prime time for hiking in the desert Southwest. Skiing – downhill or cross-country – is fun in snowy areas. Exploring with family and friends and continuing to learn new things even when school's out is fun – even if it's chilly out.

This section is all about taking adventures, even if you're not able to get outside for an adventure.

Build a feeder and identify the birds that show up in warmer states. If you're in a colder area, create a snow-inspired story based on artworks in the Smithsonian collection. Create a sign of gratitude for your mail carrier, wherever you are.

There is so much to do here. And when you're done, you can share your journey with friends and relatives near and far.

I hope you enjoy this guide as much as we enjoyed creating it.

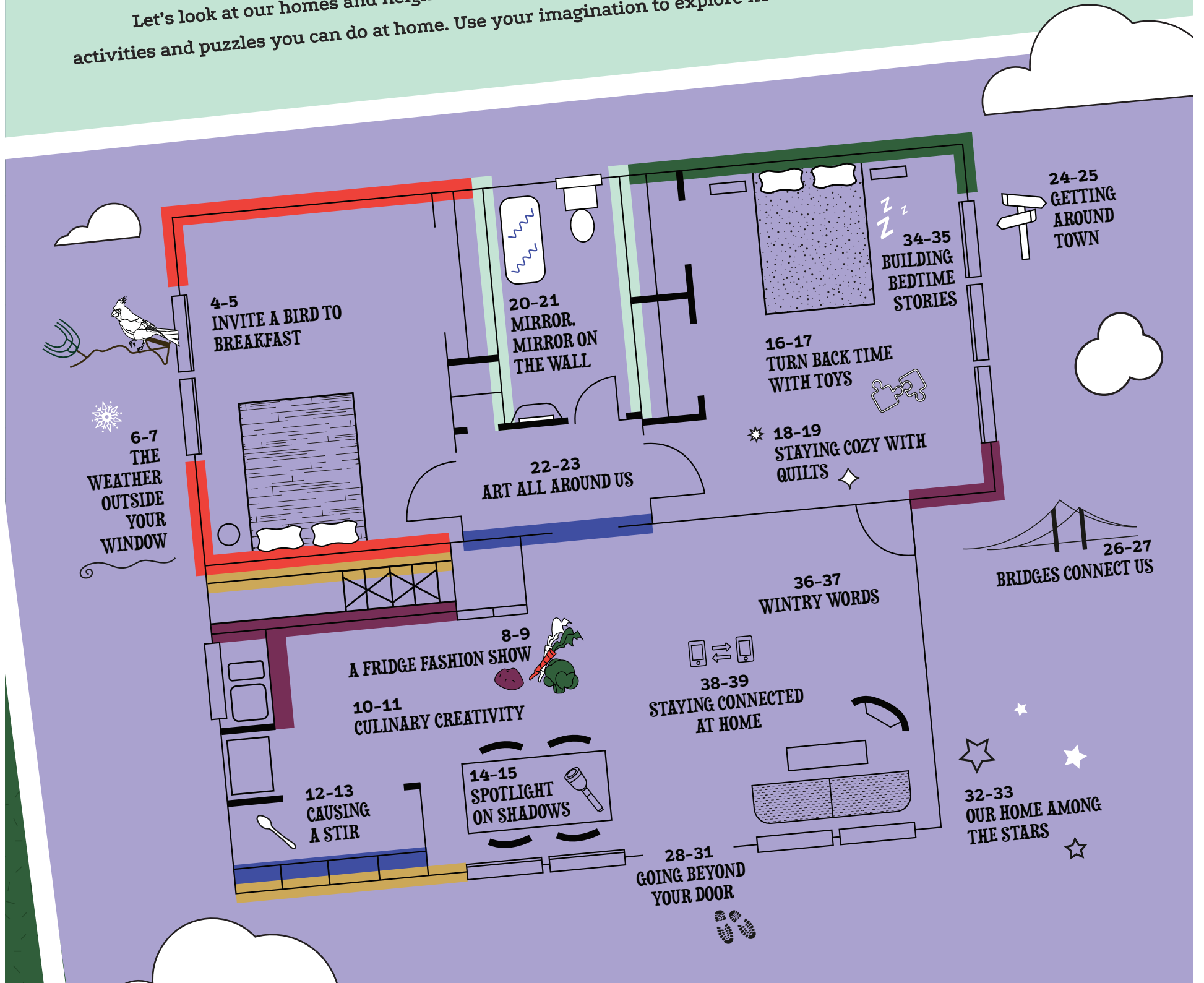
Have fun on your journey!

Nicole Carroll
Executive editor - USA Today



AT HOME ACTIVITIES

Let's look at our homes and neighborhoods together in new ways! In this guide, you'll find fun activities and puzzles you can do at home. Use your imagination to explore new ideas with the Smithsonian.



INVITE A BIRD TO BREAKFAST

THIS HOMEMADE BIRD FEEDER WILL MAKE YOUR NEIGHBORHOOD BIRDS SING WITH JOY!

SUPPLIES:

- Toilet paper tube
- Bird seed
- Peanut butter, nut butter or shortening
- Scissors or hole punch
- Butter knife
- String or ribbon
- Flat craft stick or clean popsicle stick

INSTRUCTIONS:

1. With a pair of scissors or a hole punch, make a hole on both ends of the tube. This is for the string to hang your feeder.
2. Make a small slit straight through the center of the tube for the perch. You may need an adult's help for this step!
3. Use a butter knife to cover the tube with an even coat of peanut butter, nut butter or shortening. Make sure to leave some room around the perch slits!
4. Roll the tube in the birdseed. Push down gently so that the seeds stick.
5. Thread the string through the holes on either end of the tube. Tie double knots so that the string stays secured.
6. Find the slits and slide the craft stick through them to make the perch.
7. Hang your bird feeder someplace where you can see it!



<< NATIONAL ZOO

>> SMITHSONIAN AMERICAN ART MUSEUM

Keep an eye out your window and track the resident birds that make your region home year-round, as well as the migratory birds who travel through in the spring and fall.



Adapted from an activity created by the Smithsonian's National Zoo and Conservation Biology Institute.



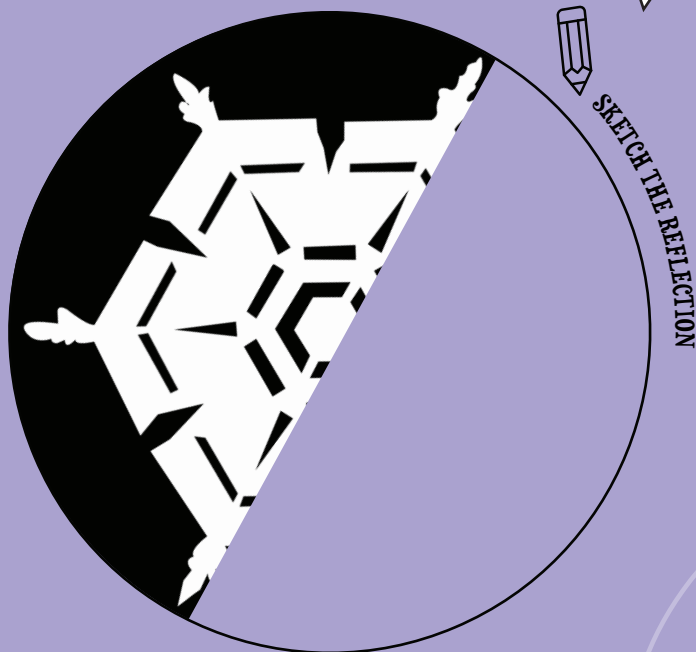
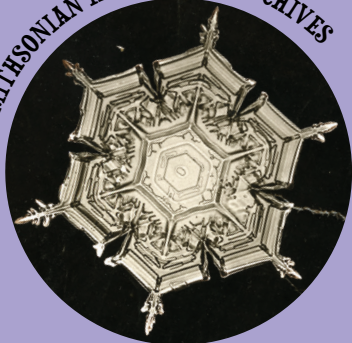


SKETCHES



DATE	TIME	SPECIES	NOTES
↗			

>> SMITHSONIAN INSTITUTION ARCHIVES



THE WEATHER OUTSIDE YOUR WINDOW

Though snowflakes are a common symbol for winter, winter weather can be different depending on where you live. Sketch the symmetrical reflection of each of these snowflakes bringing a little snow to where you are.

Attaching a camera to his microscope in 1885, Wilson Bentley took these photomicrographs and more than five thousand others. These supported the belief that no two snowflakes are alike, leading scientists to study his work and publish it in scientific articles and magazines.

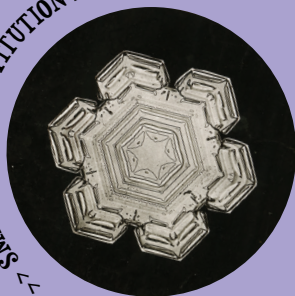
ES

EL CLIMA FUERA DE TU VENTANA

Aunque los copos de nieve son un símbolo común del invierno, el clima invernal puede ser diferente según el lugar donde vivas. Dibuja el reflejo simétrico de cada uno de estos copos de nieve trayendo un poco de nieve a donde estás.

Al colocar una cámara en su microscopio en 1885, Wilson Bentley tomó estas microfotografías y más de cinco mil otras. Estos apoyaron la creencia de que no hay dos copos de nieve iguales, lo que guió a científicos a estudiar su trabajo y publicarlo en revistas de ciencia.

SMITHSONIAN INSTITUTION ARCHIVES <<



What's the forecast for today where you are?
 Today is: _____

Location: _____
 Low temperature: _____ High Temperature: _____

Will it be sunny, cloudy, rainy, snowy, windy? Draw a picture.

What clothing should you wear today? Draw a picture.

ES ¿Cuál es el pronóstico del clima hoy en tu ciudad?
 Hoy es: _____
 Ubicación: _____ Temperatura máxima: _____
 Temperatura mínima: _____

¿Estará soleado, nublado, lluvioso, nevado, ventoso? Dibuja una imagen.
 ¿Qué ropa deberías ponerte hoy? Dibuja una imagen.

SKETCHES 

DID YOU KNOW?

Joseph Henry, the first Smithsonian Secretary and leader, began the first national weather service. He collected and analyzed weather data from across the U.S. to provide warnings about storm patterns.



>> SMITHSONIAN INSTITUTION ARCHIVES





>> SMITHSONIAN LIBRARIES AND SMITHSONIAN GARDENS

BRAINSTORM YOUR IDEAS HERE!

Favorite vegetable or fruit:

SOME IDEAS: POTATO. STRAWBERRY. JALAPEÑO PEPPER

Personality: -----

SOME IDEAS: SERIOUS, GOOFY, HEROIC

Accessories: -----

SOME IDEAS: NECKLACE, CAPE, BOOTS

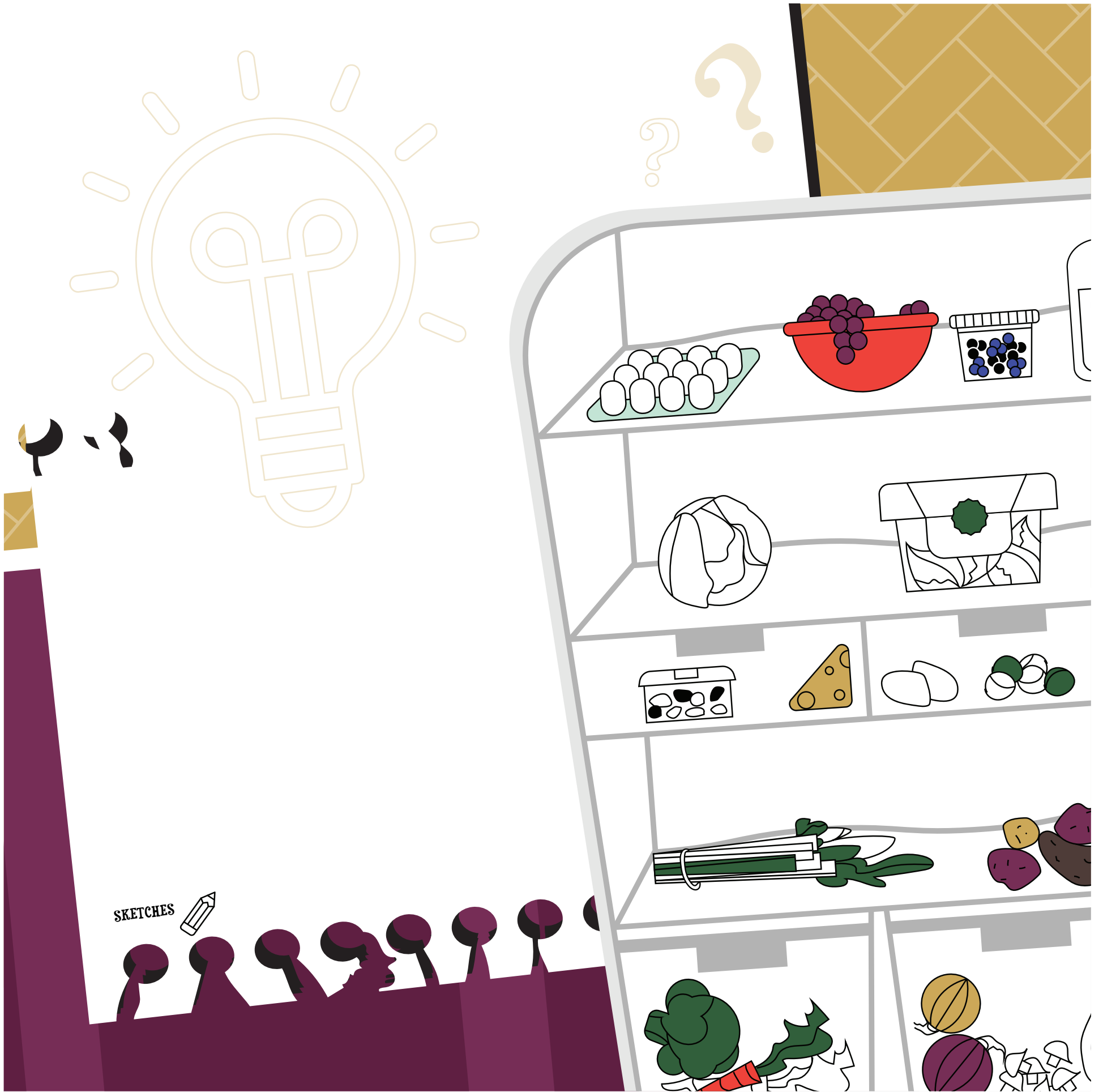
A FRIDGE FASHION SHOW

In the late 1800s, fun (and a bit silly!) seed cards like this one featuring a carrot man with a mustache, monocle and top hat were used to inspire people to buy seeds. Think about your favorite vegetable or fruit that maybe others in your home don't appreciate quite as much as you do.

Draw its outline. Next, let's give it a personality just like carrot man! Add your own accessories and human features to it. The next time everyone sees that vegetable or fruit, perhaps they'll smile just a little bigger!

BONUS:

Play an online interactive game from the Smithsonian Science Education Center that lets you travel around the world to learn about building healthy meals s.si.edu/PickYourPlate



CULINARY CREATIVITY

There seems to be a kitchen utensil for every need. Many chefs are known for stocking their home kitchen with gadgets and utensils that help create amazing culinary creations.

What types of gadgets can you dream up for the kitchen?

To help you brainstorm ideas, circle the action words you might help with in the kitchen.

- CHOP
- CUT
- DICE
- GRATE
- MASH
- MEASURE
- MIX
- PEEL
- POUR
- SCOOP
- SPREAD
- STIR

X R H U D V M D T A F G N B B
 X E I N R E K A U V E G E M O
 M W D T A E Y E C R J T Y O H
 N T N S S P N R K I A X K M H
 X F U M I O D P C R S I E W Z
 Y R B V Q O J S G P Z M P A W
 E M M P M C Y L N H P O A S A
 H J E F Y S E W P U H O C W H
 N S K O P E A D D C Y U U O M
 J N A O P H X E I B J B R R V
 Q Z G M I R N V E C S X J T P
 K P E E J Z J T N Z E J D L I
 E M K X M T G P W H U Q D R G
 U D P C J I O Z Y G A A R T P
 I T P Y V B N B F C D Z D I O

WHAT DO YOU THINK THIS OBJECT IS USED FOR?

This is a comal (or griddle) used by Concepción "Concha" Sanchez, who migrated from Mexico in 1912. She supported her family by selling tortillas and tamales in her California neighborhood.

Sometimes families use special tools or cookware to make and eat foods from their culture. What does your family use to cook?

→ NATIONAL MUSEUM OF AMERICAN HISTORY



Based on an activity from the Smithsonian Latino Center and an invention challenge created by the Spark!Lab team at the National Museum of American History.

THINK IT!

Have a great idea for an invention.
We could really use a kitchen gadget that

[Blank white box for writing]

EXPLORE IT!

Investigate inventions and ideas of the past. Is there a gadget in a drawer that might need a few tweaks? A task that could be improved with the right combination of tools?

SKETCH IT!

Draw pictures and diagrams to figure out how your invention might work.

CREATE IT!

Build a prototype or model of your idea.

ES

¡PIÉNSALO!

Desarrolla una gran idea para un invento. Realmente nos vendría bien un aparato de cocina que

[Blank white box for writing]

¡EXPLÓRALO!

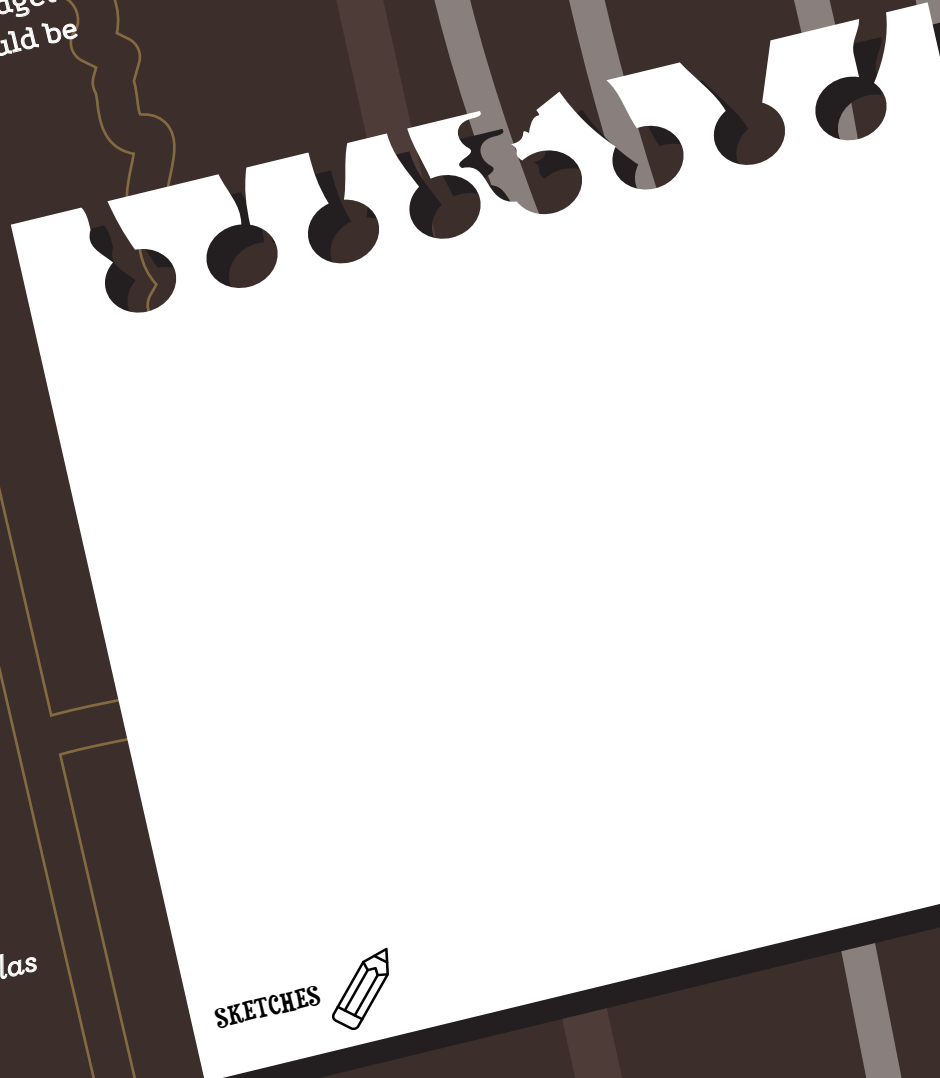
Investiga inventos e ideas del pasado. ¿Hay algún aparato o juguete guardado en la cajonera que pueda necesitar algunos ajustes? ¿Podrías cumplir con esa tarea utilizando las herramientas adecuadas?

¡PLÁSMALO!

Haz dibujos y diagramas para descubrir cómo podría funcionar tu invención.

¡CREALO!

Construye un prototipo o modelo de tu idea.



SKETCHES 

BONUS:
Download a free Spark!Lab Inventor's Notebook to help you document all the fun and hard work that goes into inventing. s.si.edu/InventorsNotebook

CAUSING A STIR

Take a look at these utensils.
What do you imagine they are used to eat or scoop up?

- 1 This fork might be used to _____
- 2 I would eat _____ with this spoon!
- 3 I imagine this spoon is for _____



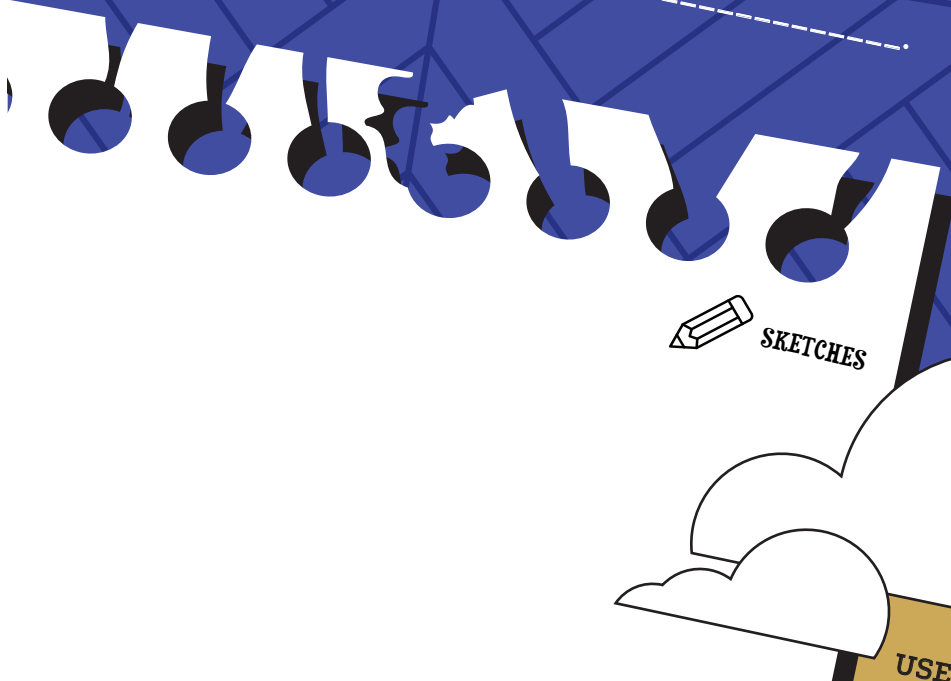
--> COOPER HEWITT, SMITHSONIAN DESIGN MUSEUM



--> COOPER HEWITT, SMITHSONIAN DESIGN MUSEUM



--> COOPER HEWITT, SMITHSONIAN DESIGN MUSEUM



USE YOUR IMAGINATION:
Design a utensil you could use to eat... a cloud! These examples from a catalog in 1915 might help you with some ideas, but use your imagination. You can create something totally new and mix ideas from things you've seen before.



--> SMITHSONIAN INSTITUTION LIBRARIES

ADAPTED FROM AN ACTIVITY CREATED BY THE
COOPER HEWITT, SMITHSONIAN DESIGN MUSEUM

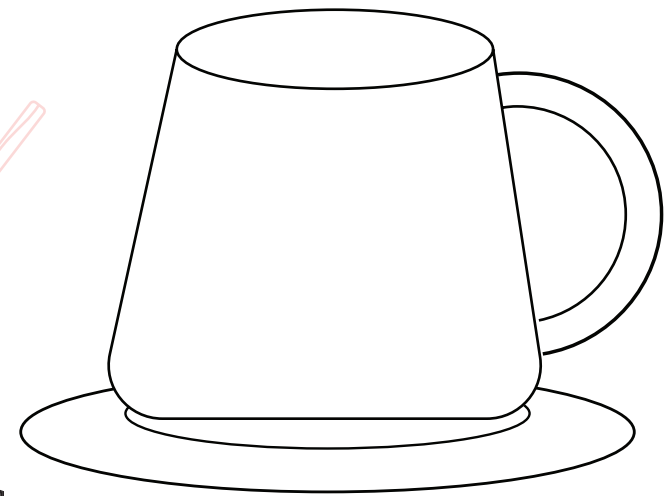
WHAT'S IN YOUR CUP?

CLASSIC MEXICAN HOT CHOCOLATE FROM THE NATIONAL MUSEUM OF THE AMERICAN INDIAN'S MITSITAM CAFÉ

- 1 gallon milk
- ½ stick Mexican or regular cinnamon
- 3 arbol chiles
- 1 pasilla pepper, or dried poblano
- ½-1 cup sugar (depending on taste)
- 3 pieces Mexican chocolate
- 1 cup cocoa powder

TO PREPARE WITH AN ADULT:

Heat milk with cinnamon and dried peppers. Once milk has scalded, remove pan from heat. Remove cinnamon and dried peppers. Break Mexican chocolate into small pieces. Whisk sugar, cocoa powder, and Mexican chocolate pieces into hot milk. Place pan back on stove and whisk spiced chocolate milk until it simmers. Serve immediately. Makes 8 very generous servings.



What designs would you add to your own cup? You might consider patterns of different colors, flowers and shapes!

>> NATIONAL MUSEUM OF THE AMERICAN INDIAN



WHAT DO YOU THINK THIS OBJECT IS USED FOR?

A molinillo, or stirring stick, is a kitchen tool similar to a whisk. Molinillos like this one, created in 1930, are fit into a container. The handle is then used as a rotational axis, turned between two hands placed palms inward until the hot beverage begins to froth.

>> NATIONAL MUSEUM OF THE AMERICAN INDIAN



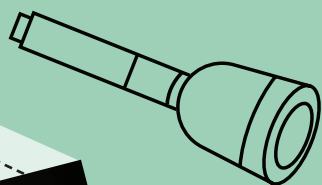
Notice the red, yellow and black floral and geometric designs that are painted on these gourd cups and bowl. These cups and bowls were created by Mayan artisans in 2000 and are used to serve hot chocolate.

SPOTLIGHT ON SHADOWS

Look at these artworks of two kitchen tables. What do you notice? Where do you think the light is coming from? What shapes is the light making?



>> SMITHSONIAN AMERICAN ART MUSEUM



>> SMITHSONIAN AMERICAN ART MUSEUM

TRY THESE ACTIVITIES FOR EXPLORING SHADOWS AND LIGHT:

Take a flashlight into a dark room. Shine the light onto a wall, then play with moving your hand in front of the light. What shadows can you make? Then, try other objects. What do their shadows look like? Try moving your hand or the object further from the light. What happens?

Cut out figures, such as animals or people, then attach them to a popsicle stick. Set up a lamp or flashlight in front of a wall, then darken the room. Hold and move the figures in front of the light. Take on a character and act out a scene with a partner in your home!

GUESS WHAT IS MAKING THESE SHADOWS.

_____ and _____



BONUS:

Learn more about the science behind shadows you see throughout different parts of the day with the Smithsonian Science Education Center. s.si.edu/Shadows

Adapted from a "Talk with Me Toolkit" activity from the Smithsonian Center for Learning and Digital Access.



SCREEN TIME

You can think of Japanese screens as portable works of art that can fold and unfold. About 300 years ago, Japanese homes did not have separate rooms like living rooms or bedrooms. Families would eat, entertain, and study during the day and use the same room at night to sleep in.

So, what if you wanted to study while your sibling wanted to hang out with friends? Here's where a Japanese folding screen comes in handy to give you privacy. Take a look at this artwork: this is a Japanese folding screen and then there's a painting of a Japanese folding screen on it!



HOW MANY CATS DO YOU NOTICE IN THIS JAPANESE SCREEN?
 HOW MANY PANELS, OR INDIVIDUAL RECTANGLES DO YOU SEE?

--	--	--	--

BONUS:

Learn more in this online activity and create a mini folding screen with some household supplies s.si.edu/JapanAtHome

Adapted from an activity created by the National Museum of Asian Art

HOW WOULD YOU DECORATE
 A SCREEN FOR YOUR HOME?

TIC-TAC-TOE



WINNER:

You are X, your friend is O. Players take turns putting their marks in empty squares. The first player to get 3 of their marks in a row (up, down, across, or diagonally) is the winner.



WINNER:

ES

ERES X, TU AMIGO ES O

Los jugadores se turnan para poner sus marcas en cuadrados vacíos. El primer jugador que obtenga 3 de sus marcas seguidas (arriba, abajo, a lo ancho o en diagonal) es el ganador.

TURN BACK TIME WITH TOYS

Do you recognize any of these games and toys? Many of these were activities that adults in your life might be especially familiar with from their own childhoods.

Match the clues with the toys from the 20th century.

A



B



C



D



G



E



F



ES


RETROCEDE EL TIEMPO CON JUGUETES


¿Reconoces alguno de estos juegos y juguetes? Muchas de estas eran actividades con las que los adultos podrían estar familiarizados desde que eran niños.


Une las pistas con los juguetes del siglo XX.





ES


----- 
 This puzzling toy was created by a Hungarian professor of architecture in 1974 and is made up of 26 visible "cubies".


----- 
 This two-player strategy board game played on a checkerboard with 64 squares arranged in an 8x8 square grid was created by artist Man Ray in 1962.


----- 
 This toy was created by two Brooklyn, NY candy store owners in 1903 and based off of a newspaper story about a U.S. President.


----- 
 This toy was created in 1989 and allowed gamers to travel with their video games, including the very popular game of Tetris.


----- 
 This toy, made in 1984, is a modern day stereoscope, allowing the user to view a pair of separate images, depicting left-eye and right-eye views of the same scene, as a single 3D image.


----- 
 This toy was made in 1933 with corn husks by an artist and doll-maker from the Seneca tribe of the Iroquois Confederacy.


----- 
 This gameboard is for playing ayoayo, the Yoruba version of mancala, the generic version of "count and capture" games.


----- 
 Este desconcertante juguete fue creado por un profesor de arquitectura húngaro en 1974 y está compuesto por 26 "cubos" visibles.


----- 
 Este juego de mesa para dos jugadores se desarrolla en un tablero con 64 cuadrados 8x8, un juego de estrategia que fue creado por el artista Man Ray en 1962.

----- 
 Este juguete fue creado por dos propietarios de tiendas de dulces de Brooklyn, NY en 1903 y se basó en el reportaje publicado en un periódico, sobre un presidente de los Estados Unidos.

----- 
 Este juguete fue creado en 1989 y permitió a los jugadores viajar con sus videojuegos, incluido el popular juego de Tetris.

----- 
 Este juguete, fabricado en 1984, es un estereoscopio moderno que permite al usuario ver un par de imágenes separadas, que representan vistas del ojo izquierdo y derecho de la misma escena, como una sola imagen 3D.

----- 
 Este juguete fue hecho en 1933 con hojas de maíz por un artista y fabricante de muñecas de la tribu Seneca de la Confederación Iroquesa.

----- 
 Este tablero es para jugar ayoayo, la versión yoruba de mancala, la versión genérica de juegos de "contar y capturar".version of "count and capture" games.

ANSWER KEY: A C E D F B G

BONUS:

Read about the stories behind the beloved characters of the movie, "Toy Story" with the Smithsonian Tween Tribune. s.si.edu/Toys

STAYING COZY WITH QUILTS

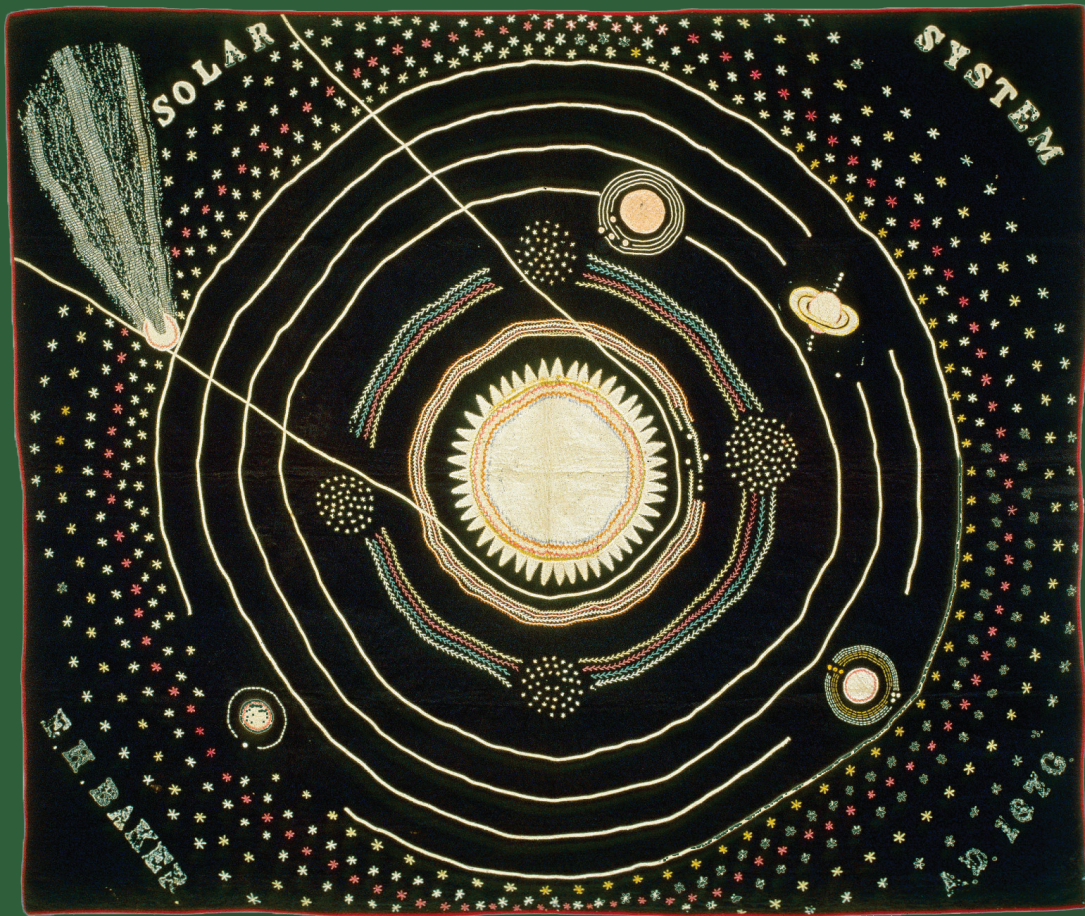
Quilts do so much more than keep us warm. They are works of art that tell stories, preserve history and help us celebrate and remember important moments in our lives – and are often passed down through generations.

Look carefully at this quilt.
What do you think it represents?
When do you think it was made?

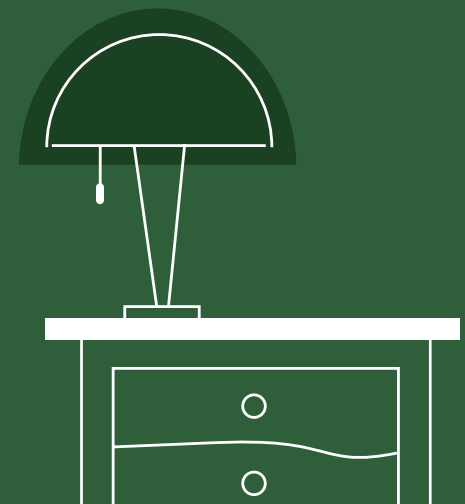
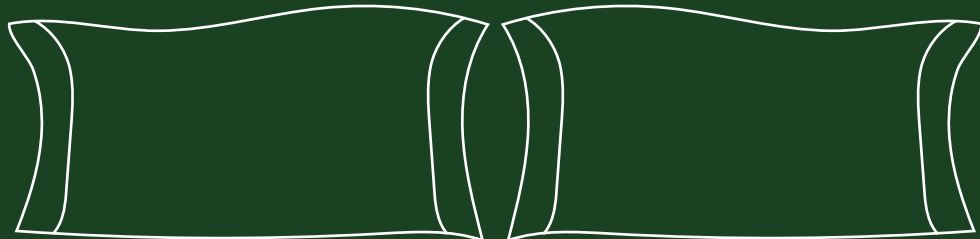
How is this quilt different from a quilt in your home?

What do quilts remind you of?
What moments in our lives do we associate with quilts?

How does this quilt tell a story?
Can a story be told by more than just words?



>> NATIONAL MUSEUM OF AMERICAN HISTORY





>> **FOUR SWALLOWS.** SMITHSONIAN AMERICAN ART MUSEUM
 *NOTE: SWALLOWS ARE BIRDS FOUND AROUND THE WORLD ON ALL CONTINENTS, INCLUDING OCCASIONALLY IN ANTARCTICA!



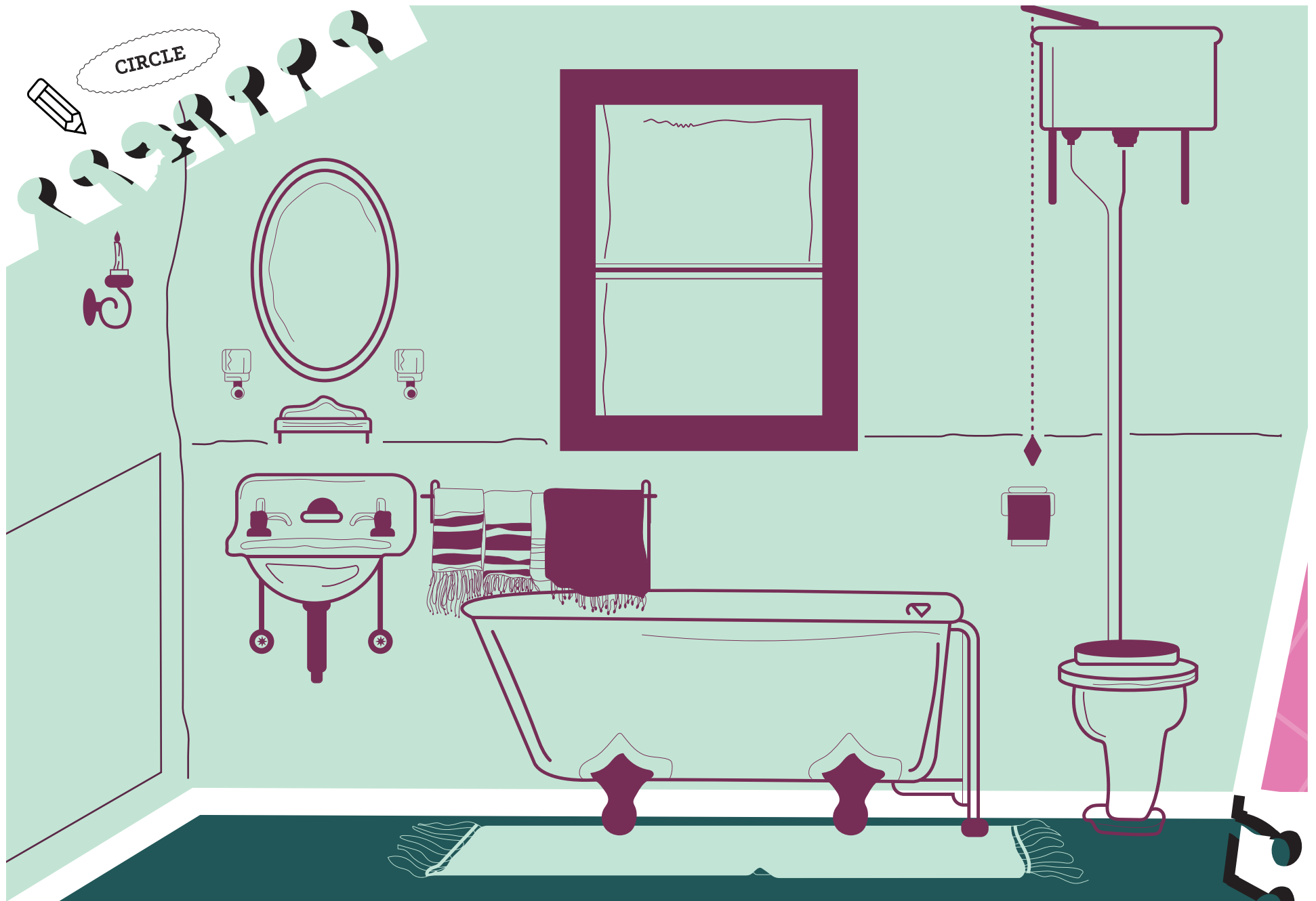
>> **CATHEDRAL WINDOW QUILTS.**
 ANACOSTIA COMMUNITY MUSEUM

NAME YOUR QUILT:

Use these quilts as inspiration to create your own quilt. You can create a story quilt like the "Solar System" quilt, or create a repeating pattern that reminds you of something else in your neighborhood, like groups of birds or colorful cathedral windows.

ES NOMBRA TU EDREDÓN:

Utiliza estos edredones como inspiración para crear tu propia colcha. Puedes crear una colcha de historia como la "Solar Colcha System", o crea un patrón repetitivo que te recuerde algo más en tu vecindario, como grupos de pájaros o coloridas ventanas de catedral.



IDEAL BATHROOM

This image shows “an ideal bathroom” from around 1900- over 100 years ago! Circle all of the things that look different from your own bathroom today.

- What changes would you make to update this bathroom?
- How would you decorate the walls to add your own personality?

ES

EL BAÑO IDEAL

Esta imagen muestra “un baño ideal” del año 1900 ¡más de 100 años atrás! Encierra en un círculo todas las cosas que ves diferentes comparándolas con tu baño actual.

- ¿Qué cambios harías para actualizar este baño?
- ¿Cómo decorarías las paredes para agregarle un toque acorde a tu personalidad?

MIRROR, MIRROR ON THE WALL

Have you ever noticed how sometimes writing you see in a mirror is confusing to read. You can read this message by standing a mirror above the writing.

HINT:

Think about which letters of the alphabet are made only of letters that have a horizontal axis of symmetry, meaning if you "folded" the letters, their two halves would match perfectly.

FOR EXAMPLE,

B, _____, _____, _____, _____

WIRBROB AS ON YOUR PAPER.
WILL LOOK THE SAME IN THE
CAN YOU WRITE 3 WORDS THAT
THE QUESTION IS TRICKY:



ANSWER THIS MESSAGE IN THE SAME KIND OF WRITING:

Based on an "Art to Zoo" activity from the Smithsonian Center for Learning and Digital Access.

ANSWERS INCLUDE:
BOOK, OX, HIDE, CHOKO, CODE, FEK, DECK, HIKE

FUN FACES FROM FOUND OBJECTS

Artist Marisol Escobar was a French sculptor of Venezuelan heritage who worked in New York City. Much of her work included 3-dimensional portraits using found objects, including pieces of wood, plastic, television sets, clothes, jewelry, shoes, and drinking glasses.

Let's try assemblage, sculptures made by grouping objects together, like Marisol Escobar!

SUPPLIES:

Found objects – that means anything! You can use paper scraps, boxes, food, craft supplies, toys, the entire artwork should be made from objects.

ES

CARAS DIVERTIDAS DE OBJETOS ENCONTRADOS

La artista Marisol Escobar fue una escultora francesa de ascendencia venezolana que trabajó en la ciudad de Nueva York. Gran parte de su trabajo incluyó retratos tridimensionales utilizando objetos encontrados, como piezas de madera, plástico, televisores, ropa, joyas, zapatos y vasos para beber.

Probemos el ensamblaje, esculturas hechas agrupando objetos (como Marisol Escobar!)

SUMINISTROS:

Objetos encontrados: eso significa ¡cualquier cosa!
Puedes utilizar trozos de papel, cajas, comida, materiales para manualidades, juguetes, toda la obra de arte debe estar hecha de objetos.

BONUS:

Learn more about artist Marisol Escobar in this Young Portrait Explorers collection of resources. s.si.edu/MarisolEscobar

Based on an activity from the National Portrait Gallery.

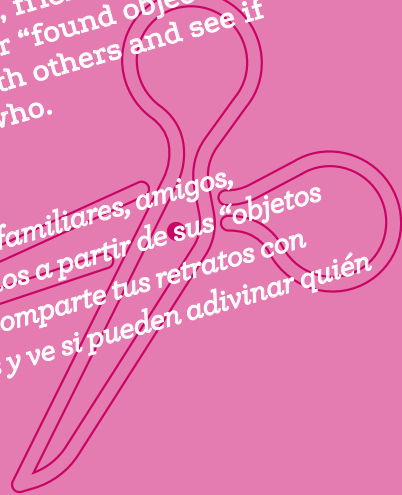
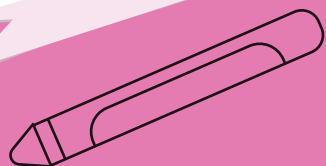
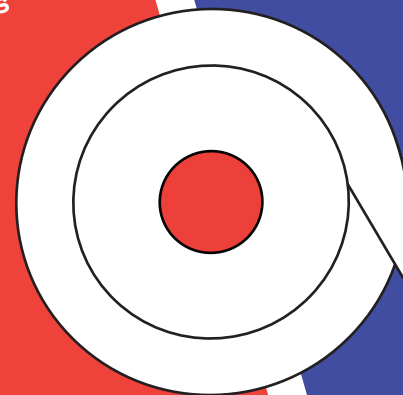
INSTRUCTIONS:

Assemble faces of family, friends, teachers and neighbors from your "found objects". Share your portraits with others and see if they can guess who's who.

ES

INSTRUCCIONES:

Reúne rostros de familiares, amigos, maestros y vecinos a partir de sus "objetos encontrados". Comparte tus retratos con otras personas y ve si pueden adivinar quién es quién.



CREATING WITH CLOTHING FROM YOUR CLOSET

SUPPLIES:

A variety of colorful shirts, socks, pants and shoes. Shape your clothes to create a composition as colorful as Rufino Tamayo's prints. Your wardrobe is your paint palette!

INSTRUCTIONS

1

GATHER YOUR MATERIALS:

Find some clothing that is patterned, and some that is solid. What other clothing items might work for your composition?

2

SET UP YOUR CANVAS:

Lay down the canvas for your composition. You can use one big piece or several little pieces to create the background.

3

FOLD AND MOLD:

You can make neat folds, or scrunch clothing into the shapes in the artwork. What do you prefer?

4

LAYER UP:

Add layers and arrange your own composition with the colors of the fabrics until you're happy with the result.

5

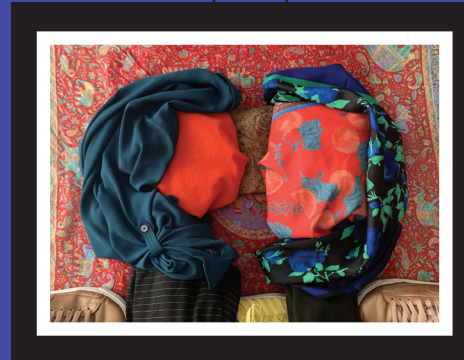
IT'S ALL IN THE DETAILS.

Fluff, crinkle, wrap, or pinch your clothes to create volume, texture, and more defined shapes (like a nose).

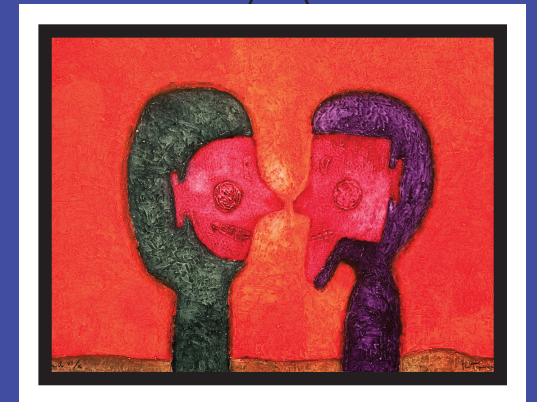
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LOOK AT WHAT YOU CREATED!

You can do this again and again with other artworks and other items from your closet. Just remember to clean up and put everything back when you finish.



>> HIRSHHORN MUSEUM AND SCULPTURE GARDEN



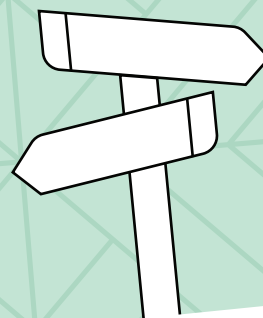
>> "TWO HEADS" BY RUFINO TAMAYO



Based on an art-inspired activity by the Hirshhorn Museum and Sculpture Garden.

GETTING AROUND TOWN

Do you recognize the place in this painting? This is a painting of Sesame Street.
 A man named Alan Compton who worked on the TV show, "Sesame Street" painted this picture in 1979. Look closely at the painting.
 What do you see in this neighborhood? Who do you see in this neighborhood?



>> NATIONAL MUSEUM OF AMERICAN HISTORY

Take a walk around your own community. Most communities contain lots of different building styles. Think about things like the age of the buildings in your area, what the buildings are used for, and what the surrounding environment is like. After you return home, draw a picture of one part of a building that was especially interesting to you.



UNA VUELTA POR LA CIUDAD

ES

¿Reconoces el lugar en esta pintura? Esta es una pintura de Plaza Sésamo. Un hombre llamado Alan Compton, que trabajó en el programa de televisión "Plaza Sésamo", pintó este cuadro en 1979. Mira de cerca el cuadro. ¿Qué ves en esta Plaza? ¿A quién ves en esta Plaza?

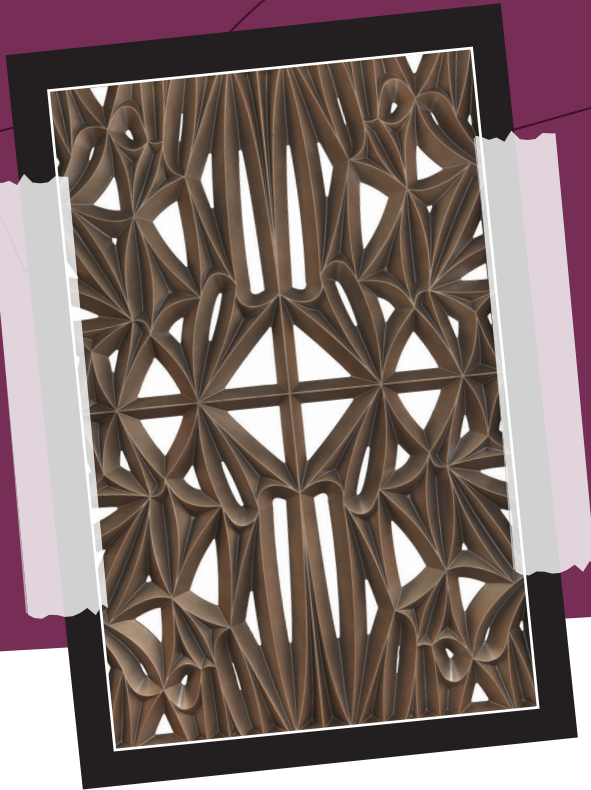
Da un paseo por tu propia comunidad. La mayoría de las comunidades contienen muchos estilos de construcción diferentes. Piensa en cosas como la edad de los edificios en tu área, para qué se utilizan los edificios y cómo es el entorno alrededor. Después de regresar a casa, haz un dibujo de un edificio que te haya parecido interesante.

SKETCHES



DID YOU KNOW?

The National Museum of African American History and Culture is the first museum on the National Mall to be recognized as a LEED Gold building. To minimize energy use, the architects and engineers designed the building to allow lots of natural light inside of the museum. The Corona, the ornamental bronze-colored metal lattice that covers the museum like a crown covers a head, helps to keep the museum cool by allowing some sunlight inside, but by blocking the rest. As a result, the museum uses less electricity for lights and air conditioning.



>> NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

BONUS:

Can you find any "green building" features? What do you think is the environmental impact of the buildings that you see? Learn more with the Cooper Hewitt, Smithsonian Design Museum in a challenge to design a green roof: s.si.edu/GreenDesign

Adapted from an activity created by the National Museum of American History.

BRIDGES CONNECT US

Have you noticed any bridges in your community, or when you've traveled? What do those bridges look like? What forces are at work?

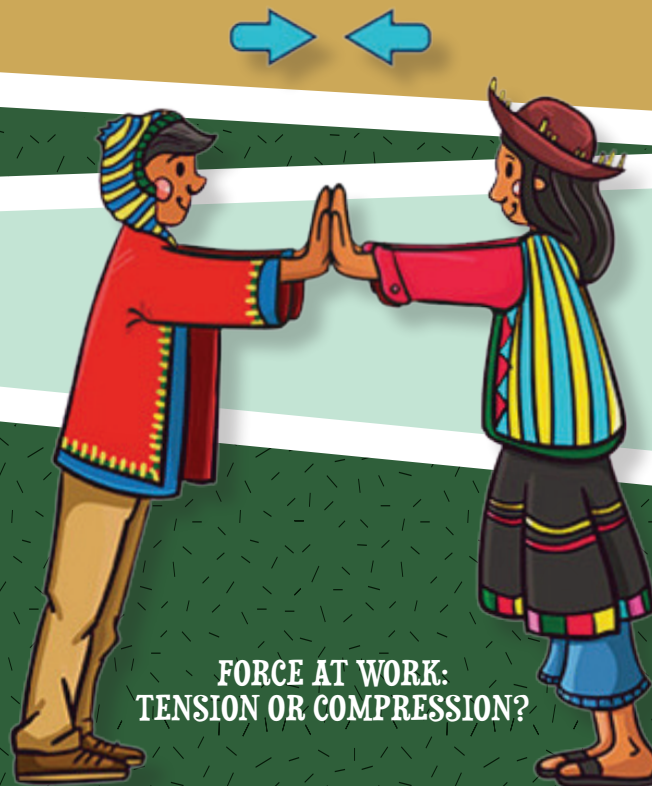
Tension forces pull and stretch material in opposite directions, allowing a rope bridge to support itself and the load it carries.

Compression forces squeeze and push material inward, causing the rocks of an arch bridge to press against each other to carry the load.

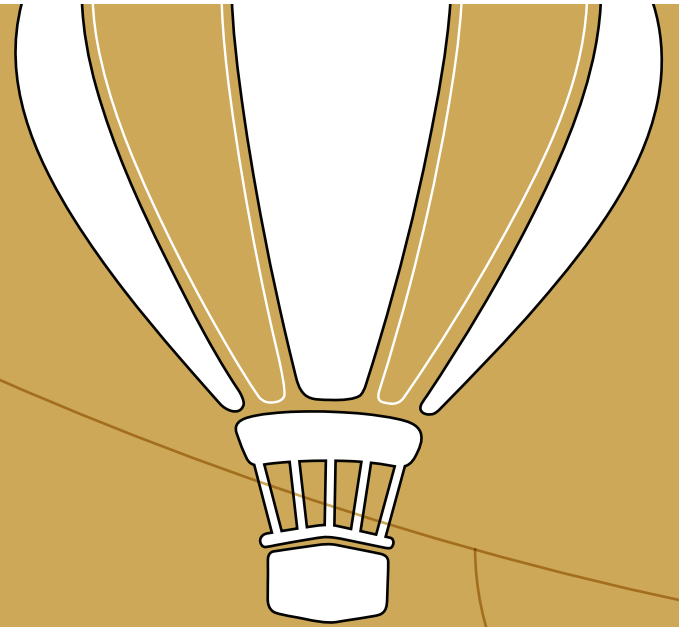
Try this! Ask a partner to work with you to demonstrate Force 1 and Force 2 as shown in the illustrations. As you work with your partner, can you feel which way the forces are directed? Based on the definitions, circle which force is tension and which is compression?



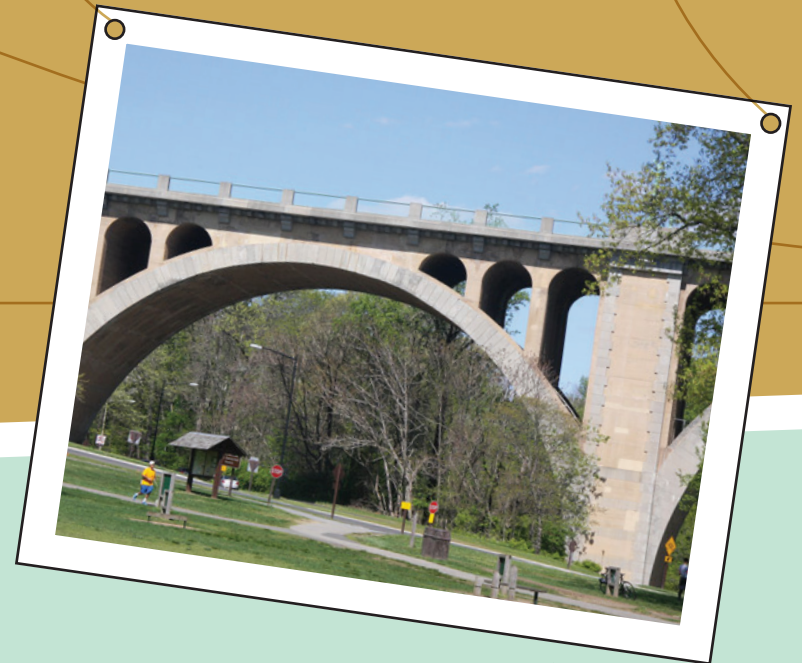
FORCE AT WORK:
TENSION OR COMPRESSION?



FORCE AT WORK:
TENSION OR COMPRESSION?



>> Q'ESWACHAKA BRIDGE



>> TAFT BRIDGE

BONUS:

Learn more about Inca engineering technology and the Q'eswachaka bridge, an important example of sustainability from both environmental and engineering perspectives, with the National Museum of the American Indian. s.si.edu/InkaInnovation

Based on an activity created by the National Museum of the American Indian.

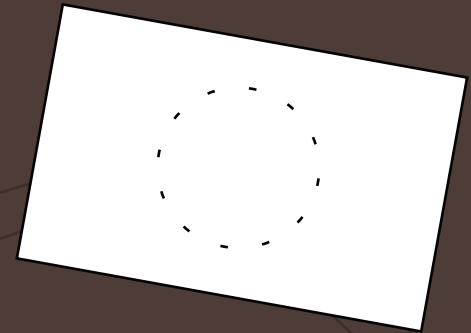
Now think about how it felt to experience these forces. When pulling apart from your partner, what shape did your bodies resemble? How about when pushing against your partner's hands? Notice that when pulling apart from your partner, your bodies form a suspended curve much like the Q'eswachaka bridge in Cusco, Peru, and when pushing toward each other, your bodies form an arch much like the Taft Bridge, in Washington, D.C. near the Smithsonian's National Zoo.

PREPARE FOR A NATURE WALK

This creative camera craft will help you focus in on all the plants and animals you might see on your next nature walk.

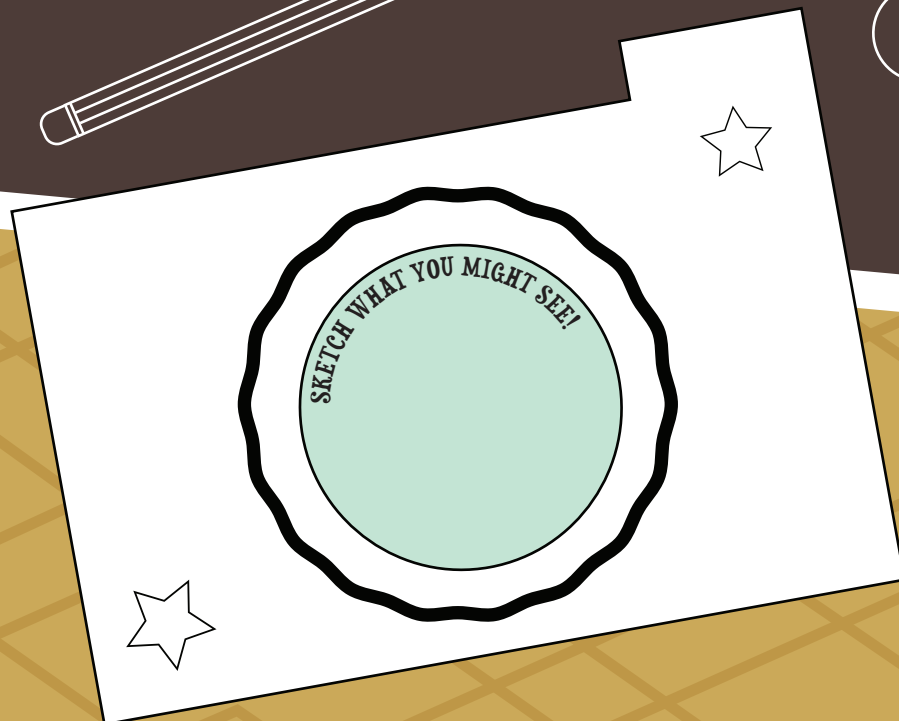
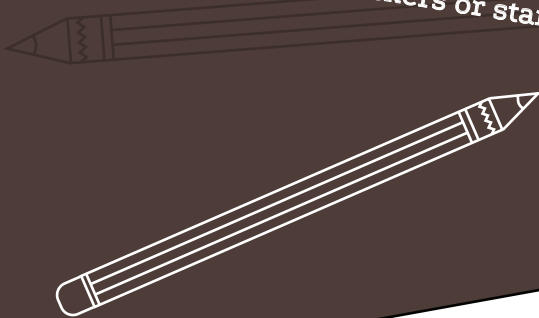
SUPPLIES:

- Rectangular piece of sturdy paper or cardboard
- We suggest 8.5" x 5.5"
- Cup
- Pencil
- Scissors
- Tape
- String, yarn or ribbon (24 - 30 inches long)
- Crayons and markers and other things to decorate your camera like stickers or stamps)



INSTRUCTIONS:

- 1 Trace a circle in the middle of your paper or cardboard.
- 2 Poke a hole in the middle of your circle, and cut around the circle to make the "lens".
- 3 On the long edge of the rectangle, make a small cut about 1.5 inches away from the corner. Turn your scissors to cut to the other side of the rectangle. This creates your camera button.
- 4 Decorate!
- 5 Attach your string to the back of the camera, using tape or stickers. You can also make two holes with a hole punch or scissors to tie your string to the camera.
- 6 Take your camera with you on your next walk outside or when you look out the window. What observations can you make?



BONUS:

Looking for a challenge? Explore biodiversity of your own backyard with these instructions for building a "biocube" and documenting any changes you notice. s.si.edu/Biocube

Adapted from an activity created by the National Museum of Natural History.

BEYOND YOUR DOOR

When exploring beyond your door on your next nature walk, try these challenges with your family:

- A color challenge: what can you find that's yellow?
- A sensory challenge: how can we use our five senses to explore?

BONUS:

For more tips, watch this video series led by an educator from the National Zoo with ideas for what to focus on on your next nature walk. s.si.edu/NatureWalk

Adapted from an activity created by Smithsonian's National Zoo and Conservation Biology Institute.

YOU CAN USE THIS CHART TO BEGIN DOCUMENTING YOUR OBSERVATIONS IN THIS FIELD JOURNAL.



DATE & TIME:

LOCATION:

WEATHER:

OBSERVATIONS: 

Write what you noticed about the wildlife you found and draw a picture

DATE & TIME:

LOCATION:

WEATHER:

OBSERVATIONS: 

FROM THE RECYCLING BIN: CREATE A PAPER BEAD NECKLACE

INSTRUCTIONS:

Find magazine pages or wrapping paper with interesting designs. Cut the paper into triangular strips. You can use the template on this sheet to make lots of strips quickly. You need 10 to 20 beads to make a necklace.

Start at the base of the triangle and wrap the paper around your stick or straw. Roll the paper all the way up.

In a small cup or bowl, mix glue with a few drops of water to make it easy to spread. Use a paint brush to coat one side of the paper.

Gently pull the beads off of the stick. Let dry for 30 – 60 minutes, then string your beads with thread or yarn. You can mix other beads with your recycled beads to make interesting patterns!



ES

DEL BOTE DE RECICLAJE: CREA UN COLLAR CON PERLAS DE PAPEL

Instrucciones: Encuentra páginas de revistas o papel de regalo con diseños interesantes. Corta el papel en tiras triangulares. Puedes utilizar la plantilla de esta hoja para hacer muchas tiras rápidamente. Necesitas de 10 a 20 perlas para hacer un collar.

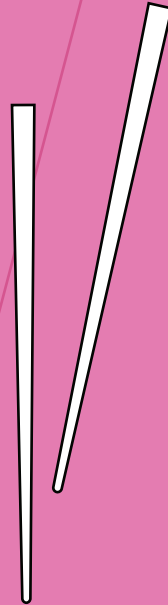
Comienza en la base del triángulo y envuelve el papel alrededor de tu palito o popote pequeño. Enrolla el papel completamente.

En una taza o tazón pequeño, mezcla el pegamento con unas gotas de agua para que se esparza fácilmente. Usa un pincel para cubrir un lado del papel.

Retira suavemente las perlas del palo. Deja secar durante 30 a 60 minutos, luego ensarta tus perlas con hilo o estambre. ¡Puedes mezclar otras curiosidades con tus perlas recicladas para hacer diseños interesantes!

SUPPLIES:

- Magazine pages or wrapping paper
- Scissors
- Glue
- Water
- Small cup or bowl
- Paint brush
- Toothpicks, chopsticks, or a straw



SUMINISTROS:

- Páginas de revistas o papel de regalo
- Tijeras
- Pegamento
- Agua
- Taza o tazón pequeño
- Cepillo de pintura
- Palillos de dientes, palillos chinos o un popote pequeño

BONUS:

Learn how you can help protect our ecosystems and join the millions of environmental stewards taking care of our planet with the Smithsonian Environmental Research Center. s.si.edu/TakeAction



Adapted from an activity created by the Smithsonian's National Zoo and Conservation Biology Institute.



BEAD TEMPLATES

BEAD TEMPLATES

BEAD TEMPLATES

BEAD TEMPLATES

BEAD TEMPLATES



OUR HOME (AND ONGOING RESEARCH LAB) AMONG THE STARS!

On November 15, 2020, Commander Victor Glover, along with fellow NASA astronauts Shannon Walker, Mike Hopkins, and Japan's aerospace exploration agency astronaut Soichi Noguchi launched into space aboard the SpaceX spacecraft Resilience. They will stay six months upon the International Space Station joining NASA astronaut and two Russian cosmonauts.

While in space, the crew will complete science experiments, spacewalks and perform upkeep on the station. Other teammates on Earth include mission control in Houston, Texas, as well as scientists and engineers across the globe. The astronauts, scientists, and engineers collaborate to bring together different knowledge and skills to ensure that their mission is a success.

DID YOU KNOW?

Since November 2, 2000, there has been a continual presence of humans in low Earth orbit living on the International Space Station. That means most students have never known a day without humans in space!

BONUS:

Watch an interview with Astronaut Victor Glover from the International Space Station with the National Museum of African American History and Culture and the National Air and Space Museum.
s.si.edu/AstronautInterview



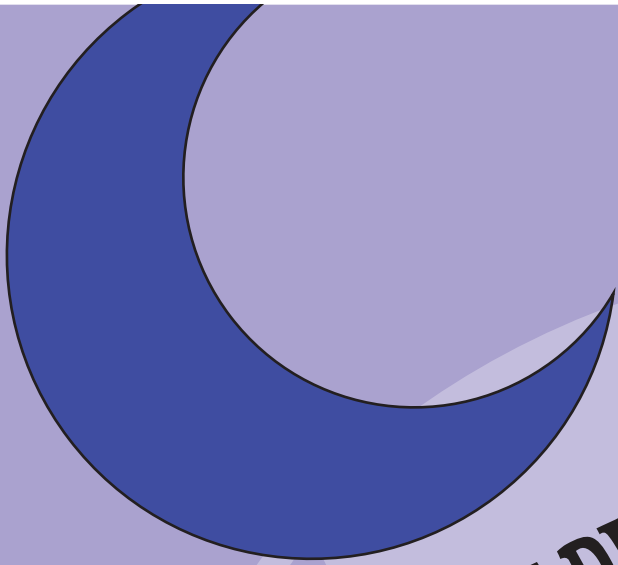
>> THE INTERNATIONAL SPACE STATION IN 2001.
NATIONAL AIR AND SPACE MUSEUM.

Whether it's on a sports team, at your school, or in your community, what does teamwork look like in your life? Use this space to express what teamwork means to you through art.

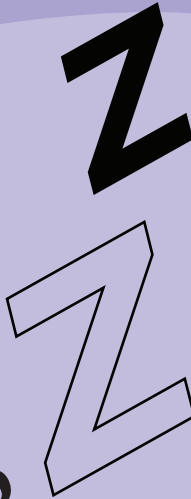
BONUS:

Learn how your family can spot the International Space Station from your backyard with the National Air and Space Museum's STEMin30 team's helpful tips. s.si.edu/SpotTheISS





BUILDING BEDTIME STORIES



Adapted from an activity
created by the Smithsonian
American Art Museum

CONSTRUYENDO CUENTOS PARA DORMIR

Construyamos juntos una
historia inspirada en la nieve.
Elige una obra de arte. ¿Cuál
nos causa más curiosidad?

Mira de cerca.
¿Cuáles son las cinco cosas
que vemos?

Hablemos de lo que sucede
en la imagen. ¿Qué está
pasando? ¿Qué te hace
decir eso?

Let's build a snow-inspired
story together.

Choose an artwork.
Which one makes us curious?

Look closely.
What are five things that we see?

Let's talk about what's happening in the
picture. What's going on?
What makes you say that?

WHAT DO YOU THINK WILL HAPPEN NEXT? DRAW A PICTURE.
¿QUE CREES QUE PASARÁ DESPUÉS? DIBUJA UNA IMAGEN.



>> BARNYARD IN WINTER.
SMITHSONIAN AMERICAN ART MUSEUM



>> WINTER ON THE CREEK.
SMITHSONIAN AMERICAN ART MUSEUM



>> SKI JUMP. SMITHSONIAN
AMERICAN ART MUSEUM



Adapted from an activity created by the National Museum of African Art.



>> NATIONAL ZOO



>> NATIONAL MUSEUM OF NATURAL HISTORY

A fable is a different type of story that often includes a moral lesson and features animals as the characters. An example you might have heard of is “The Tortoise and the Hare”. In this fable, we’ll tell the story of the spider and the leopard.

First, fill in the blanks with your own words. The parts of speech are included to help guide you but they may also add a little bit of silliness to the story. Then, read your fable aloud to a partner.

THE SPIDER AND THE LEOPARD: A FABLE

Once upon a _____ (noun), Spider went down the _____ (adjective) path that led to the _____ (noun). Leopard was there with a _____ (adjective) look in his eye. Spider _____ (past-tense verb) behind a great _____ (noun), and Leopard could not find him. “Never mind,” Leopard thought. “I will go to Spider’s _____ (noun). I will _____ (verb) behind his _____ (noun) and then I will _____ (verb) him.”

Spider was scared when he got home, so he hatched a _____ (noun). He _____ (past-tense verb) out, “Ho! My _____ (noun)!” Nobody answered. “That’s funny,” said spider loudly, “my little _____ (noun) always answers me.” With all his _____ (noun), he _____ (past-tense verb), “Ho! My house. How are you?” A _____ (adjective) voice answered. “I am fine, Mr. Spider. Come on in.”

The Spider _____ (past-tense verb) out laughing. “Now I know where you are, Mr. Leopard, and you shall never catch me.”

THE END



WINTRY WORDS

Use the clues to complete the puzzle below.

DOWN



1. Contract mail carrier Ed Biederman used this dog sled for his 160-mile route between Circle and Eagle, Alaska during _____ months. Though most contractors had replaced their sleds with airplanes by the late 1930s, a team still carried mail in Alaska into the early 1960s.

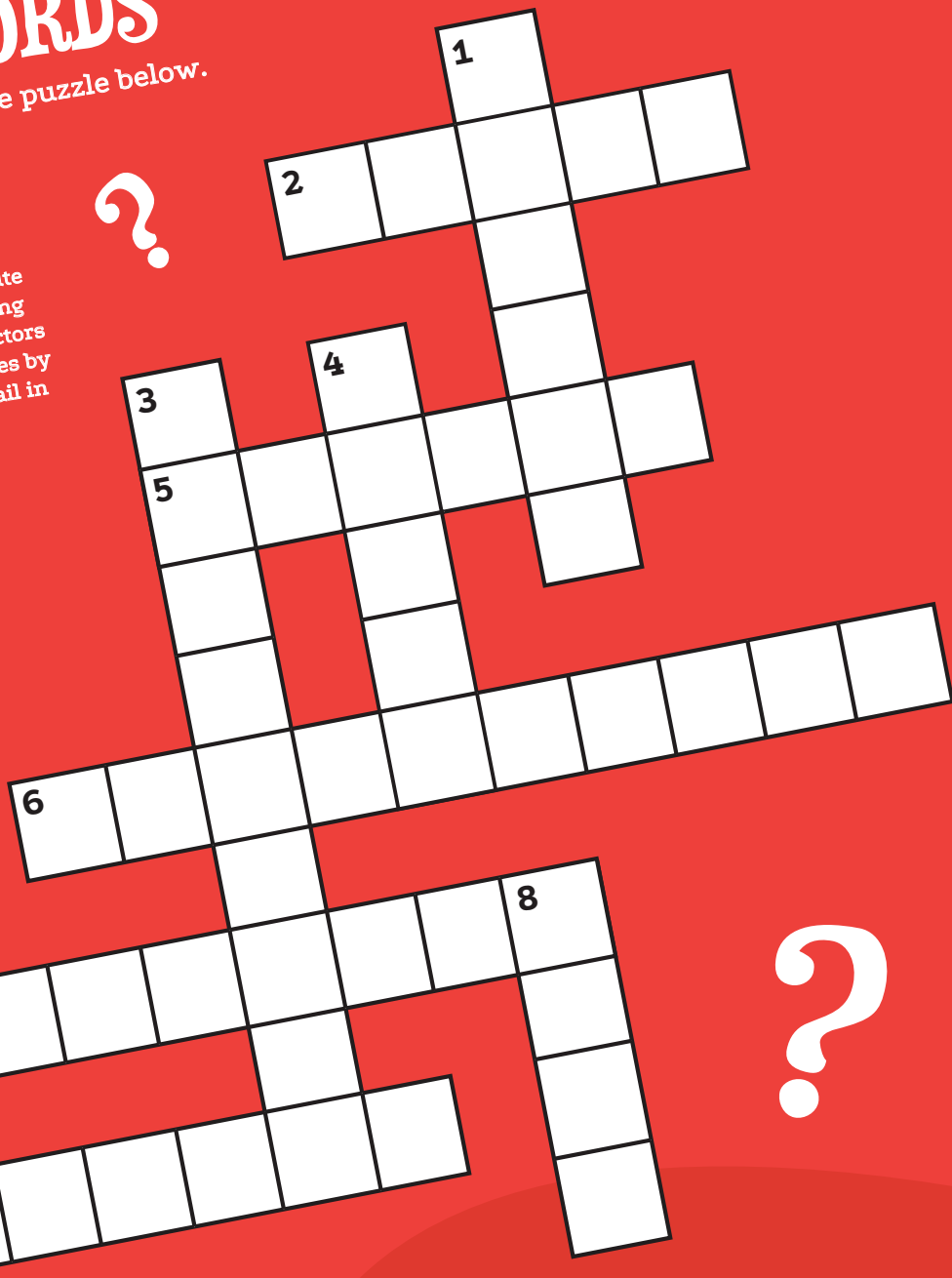
3. This yellow, rectangular tin with black lettering and design was used to store and market Huylers' drinking _____. In the late 19th and early 20th century, it went from being something a person drank to being something to eat, finally becoming a treat



4. Planning her outfit for March for Our Lives, then 11-year-old leader and speaker Naomi Wadler wanted to wear all black. Her mother said she should wear some color. The compromise? Her aunt knit her this bright _____ the night before.



8. This _____ from the late 19th century is decorated with stars and stripes. It includes painted wood with metal runners, a sleigh bell, and a leather strap.



ACROSS



2. This well-worn child's _____ is pieced in the Tumbling Blocks pattern, also referred to as Cubework or Boxes. The placement of the four-inch diamond shaped pieces cut from various roller-printed cottons creates an example of an optical illusion in textiles.

5. This jersey was worn by defenseman Bill Baker as a member of the 1980 U.S. Olympic _____ team. During that year's games, held in Lake Placid, New York, Baker and Team USA participated in one of the greatest sports upsets of all-time, defeating the Soviet Union in the medal round in the game now known as "The Miracle on Ice."



6. Attaching a camera to his microscope in 1885, Wilson Bentley took these photomicrographs and more than five thousand others. These supported the belief that no two _____ are alike, leading scientists to study his work and publish it in numerous scientific articles and magazines.



7. _____ (two words) worn and signed by American Kristi Yamaguchi, the first Asian Olympic woman to win a gold medal in women's singles when she finished first in Albertville, Canada.



9. The owner of this snow-themed _____ was Clarence E. "Hank" Snow, who enjoyed one of the most successful and long-running careers in country music. He was known for his especially distinctive voice and style.



ANSWER KEY:
DOWN 1. WINTER, 2. QUILT, 3. CHOCOLATE, 4. SCARF,
5. SNOWFLAKES, 6. ICE SKATES, 7. JACKET,
8. SLED, 9. JACKET



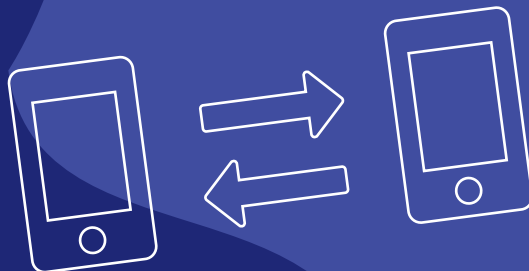


STAY CONNECTED FROM HOME

2020 was a difficult year for many. From the xenophobia (the irrational fear and hatred of foreigners and those perceived to be foreign) and racism towards Asians and Asian Americans caused by COVID-19, the disproportionate number of COVID-19 cases affecting Black, Indigenous and People of Color (BIPOC) communities, and to the national uprisings surrounding the Black Lives Matter movement, 2020 has also brought attention to longstanding injustices and how we can hope to change for the better.

We can become stronger together as we embrace the lesson that #KindnessHeals.

BONUS:
Learn more about the #KindnessHeals initiative:
s.si.edu/KindnessHeals
Adapted from an activity created by the Smithsonian Asian Pacific American Center



WHO CAN YOU TALK TO?

When times feel difficult, who can you talk to? Who do you trust will listen to you? A trusted support network- a group of friends, family members, community members, and neighbors- can help you navigate difficult moments.

How do you stay in touch and stay connected? Do you call them on the phone regularly? ...send them a text? ...write them a handwritten letter or send them artwork you've created?

WHO CAN I COUNT ON?

I CAN COUNT ON _____

BECAUSE _____



"HI! JUST CHECKING IN TO SEE HOW YOU'RE DOING..."



VISIT YOUR MAILBOX AND THANK A MAIL CARRIER

Show your gratitude for the mail and package carriers working hard to keep us connected with this coloring page. Display your finished sign on your window, mailbox or door as a message of support and thanks.

Adapted from an activity created by the National Postal Museum.

✂

Thank You

MAIL & PACKAGE CARRIERS!

~~~~~

**WE APPRECIATE YOU!**

~~~~~

Image Credits: Page 2 Lonnie Bunch III, Michael Barnes, Smithsonian Institution. Page 4 Make your own birdfeeder activity adapted from “Recycling Recess Make Something; Make a Difference!” from the National Zoo. Images: Homemade Bird Feeder Photo, Text credit and process photos credit to Elise Bernardoni. Blue Jays in Winter, study for book Concealing Coloration in the Animal Kingdom, Smithsonian American Art Museum, Gift of the heirs of Abbott Handerson Thayer. Page 6 Craft template from Wilson A. Bentley snowflake, Altered from Image no. SIA2013-09136, Record Unit 31, Smithsonian Institution Archives. Craft template from Wilson A. Bentley snowflake, Altered from Image no. SIA2008-1394, Record Unit 31, Smithsonian Institution Archives. Smithsonian Institution Archives, Record Unit 31, Image No. SIA2013-09170. Smithsonian Institution Archives, Record Unit 31, Image No. SIA2013-09136. Page 7 Smithsonian Institution Archives, Image #84-2074. Page 8 Trade card, Rice’s Seeds, Cambridge, New York, 1887, Smithsonian Gardens, Horticultural Artifacts Collection. Page 10 Comal Griddle, Gift of Anna Bermudez, Division of Cultural and Community Life, National Museum of American History. Page 12 Designing Utensils activity adapted from “Design at Home Activity Book” from the Cooper Hewitt, Smithsonian Design Museum. Images: Flaches Modell (Flat Model) Dessert Fork; Designed by Josef Hoffmann (Austrian, b. Moravia, 1870–1956); Austria; silver; 2002-3-1, Photo © Cooper Hewitt, Smithsonian Design Museum. Spoon (Sweden), ca. 1700; Made by Hans Henriksson Wettersten (active, 1682 - 1726); silver; L x W x D: 13.6 x 5 x 2.4 cm (5 3/8 x 1 15/16 x 15/16 in.); Gift of Samuel P. Avery; 1903-1-35, Photo © Cooper Hewitt, Smithsonian Design Museum. Tablespoon (France), 1966; Designed by Claude Lallanne (French, 1924 - 2019); cast and chased silver; H x W: 20 x 4.4 cm (7 7/8 x 1 3/4 in.); Museum purchase from Decorative Arts Association Acquisition Fund in honor of John L. Marion; 1990-137-5, Photo © Cooper Hewitt, Smithsonian Design Museum. John Wanamaker, New York, NY. Spring & Summer Catalog, 1915, page 114, Knives, Forks, Spoons, and Serving Utensils, Smithsonian Institution Libraries. Page 13 Molinillo, National Museum of the American Indian. Cups and bowls for serving chocolate beverages, National Museum of the American Indian. Page 14 Striped Tablecloth with two Apples, Smithsonian American Art Museum, Gift of the Sara Roby Foundation. Interior with Three Pears, Leigh Palmer, 1983, oil on linen, Smithsonian American Art Museum, Gift of the Sara Roby Foundation, 1985.30.56. Page 15 View of an Interior, Freer Gallery of Art, Smithsonian Institution, Washington, D.C.: Gift of Charles Lang Freer, F1907.127. Page 16 Game Boy, Richard Huynh, 1989, Division of American Enterprise, National Museum of American History. Rubik’s Cube, Gift of Diane Odgers, Division of Medicine and Science, National Museum of American History. Seneca Corn Husk Doll Family, by William F. Stiles, National Museum of the American Indian. Teddy Bear, gift of Mr. and Mrs. Kermit Roosevelt, Division of Political and Military History, National Museum of American History. Gameboard, gift of Monique and Jean Paul Barbier-Mueller, National Museum of African Art. Mattel View-Master owned by Michael Holman, Collection of the Smithsonian National Museum of African American History and Culture. Chess Set, Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, Washington, DC, Gift of Joseph H. Hirshhorn, 1972. Page 18 Ellen Harding Baker’s “Solar System” Quilt, Gift of Patricia Hill McCloy and Kathryn Hill Mearndon, Division of Cultural and Community Life, National Museum of American History. Page 19 Four Swallows, Smithsonian American Art Museum, Gift of Raymond Vlasin and family, with deepest appreciation for the many friends with whom Claire Vlasin quilted. Cathedral Window Quilts by Viola Canady, Anacostia Community Museum. Page 21 Activity adapted from “Turn About’s Fair Play!: Mirrors and How They Reflect,” October, 1990 Art to Zoo, Smithsonian Institution. Page 22 Assemble Faces from your Found Objects activity, created by Nicole Vance, Smithsonian National Portrait Gallery. Page 23 Activity adapted from Clothing Composition activity from the Hirshhorn Museum and Sculpture Garden. Images: Rufino Tamayo, Two Heads, 1975. Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, Washington, DC, The Joseph H. Hirshhorn Bequest, 1981. Two Heads, image from Clothing Composition activity, created by the Hirshhorn Museum and Sculpture Garden. Page 24 Sketch “Ten Years of Sesame Street” by Alan Compton, Division of Cultural and Community Life, National Museum of American History. Suspension bridge activity adapted from The Great Inka Road Activity Guide and The Great Inka Road: How can a road system be an example of innovation?, on Native Knowledge 360, from the National Museum of the American Indian. Page 25 Corona panel designed for NMAAHC (Type F: 90% opacity), Collection of the Smithsonian National Museum of African American History and Culture. Page 26 Illustration of children holding hands by Mary Ellen Hawkins for the National Museum of the American Indian, 2016. Activity adapted from Getting Around Town: Geography Learning Lab Collection, created by the National Museum of American History. Page 27 Q’eswachaka Bridge, 2014. Photo by Smithsonian’s National Museum of the American Indian. Taft Bridge in Washington, DC, 2015. Photo by Smithsonian’s National Museum of the American Indian. Page 28 Activity adapted from “Make Your Own Paper Camera!” from the National Museum of Natural History. Page 29 Activity adapted from “Explore Beyond Your Door Field Notes” from the National Zoo. Page 30 Recycled Paper Bead photos, text credit and process photos credit to Elise Bernardoni. Page 31 Recycled paper beads activity adapted from “Recycling Recess Make Something; Make a Difference!” from the National Zoo. Page 32 The International Space Station, Photo by NASA, Smithsonian National Air and Space Museum (NASM 9A01516). Page 34 Barnyard in Winter, Smithsonian American Art Museum, Museum purchase. Winter on the Creek, Smithsonian American Art Museum, Gift of Elizabeth Olds. Ski Jump, Smithsonian American Art Museum, Gift of the Harmon Foundation. Build a Story Activity created by educators at the Smithsonian American Art Museum, inspired by the work of Harvard Graduate School of Education’s Project Zero. Page 35 The Spider and the Leopard: A Fable activity by the National Museum of African Art. Clouded Leopard Cub, photo by Shellie Pick, Smithsonian’s National Zoo. Red-legged Golden Orb-web Spider, Golden Silk Orb-weaver, National Museum of Natural History. Page 36 Figure Skates worn by Kristi Yamaguchi, Gift of Kristi Yamaguchi, Division of Cultural and Community Life, National Museum of American History. Scarf, Division of Political and Military History, National Museum of American History. Team USA hockey jersey worn by Bill Baker, Sports Illustrated, 1980, Division of Cultural and Community Life, National Museum of American History. Jacket worn by Hank Snow, Bequest of Clarence E. “Hank” Snow, Division of Cultural and Community Life, National Museum of American History. Huyler’s Cocoa Tin, Division of Work and Industry, National Museum of American History. Sled Decorated with Stars and Stripes, Smithsonian American Art Museum, Gift of Herbert Waide Hemphill, Jr. and museum purchase made possible by Ralph Cross Johnson. Alaskan dog sled, National Postal Museum. 1860-1880 “Tumbling Blocks” Child’s Quilt, Gift of Mrs. Dorothy W. Faul, 1860-1880, Division of Cultural and Community Life, National Museum of American History. A Dendrite Star, Smithsonian Institution Archives, record unit 31. Page 38 “Kindness Heals” activity adapted from the Smithsonian Asian Pacific American Center. Page 39 Photograph of boy mailing letter, National Postal Museum, Curatorial Photographic Collection Photographer: Unknown, c. 1880. Mr. ZIP standing cut-out, Courtesy of National Postal Museum.

From the Smithsonian: Office of Advancement, Office of Communications and External Affairs, Office of the Undersecretary for Education and the Smithsonian education community.

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