Pandamonium Patch Program

Get ready to giggle and go wild with the 2025 Cookie Program mascot—the playful panda! Dive into their bamboo-filled world, tackle fun projects inspired by these cuddly creatures, and uncover awesome ways to help protect them. But watch out—you might get bamboo-zled as you take on the Panda-monium patch program!

Steps to earn your patch:

· Order your patch (available while supplies last)!
· Complete the 2 required activities.
· Complete 5 additional activities of your choice.

Activities marked with * have additional resources attached to this document.
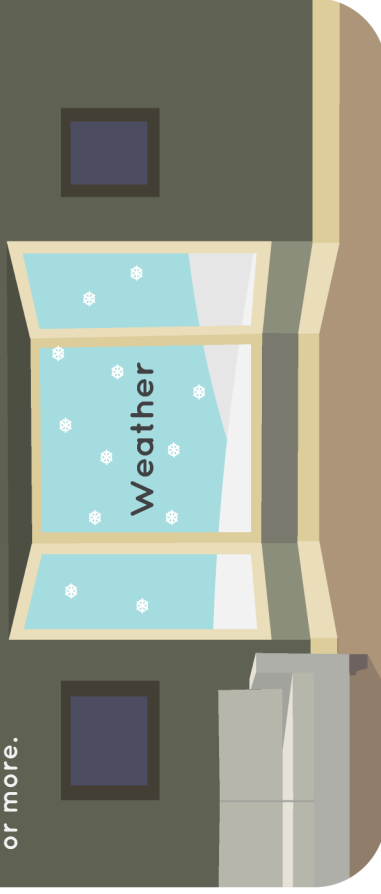Activities in green are linked to online resources.

Required

❑ Research the Giant Panda
 · San Diego Zoo
 · Toucan Box
 · Britannica

❑ Climate change is impacting the future of the Giant Panda. Learn what climate change is and its impact on the Giant Panda.

❑ Understand more about climate change.*

❑ Panda fork art*

❑ Read a book about pandas
 · Goldy Luck and the Three Pandas
 · Zoe's Rescue Zoo: The Playful Panda
 · A Girl and Her Panda (Young Adult)

❑ Complete a panda coloring sheet.*

❑ Play Capture the Bamboo*

❑ Watch pandas on a live panda-cam to observe how they live.
 · San Diego Zoo
 · China Panda Cam

❑ Learn how to create a campaign to Save the Pandas.*

❑ Create a trash art panda sculpture.*

❑ Make a panda themed treat.*

❑ Create a panda from newspaper.*

❑ Learn to write "panda" in Chinese.*

❑ Create a panda headband.*

❑ Play "Pandamonium", a printable board game.

ClimateKids

A Guide to Climate Change for Kids

Have you heard your parents or people in videos talking about climate change? Ever wondered what it is and why we care about it so much? NASA scientists have been studying Earth's climate for more than 40 years. We used what we've learned in that time to answer some of your biggest questions below!

What is climate change?

Climate change describes a change in the typical weather for a region — such as high and low temperatures and amount of rainfall — over a long period of time. Scientists have observed that, overall, Earth is warming. In fact, many of the warmest years on record have happened in the past 20 years. This rise in global temperature is sometimes called global warming.

Climate

1970 → 2010
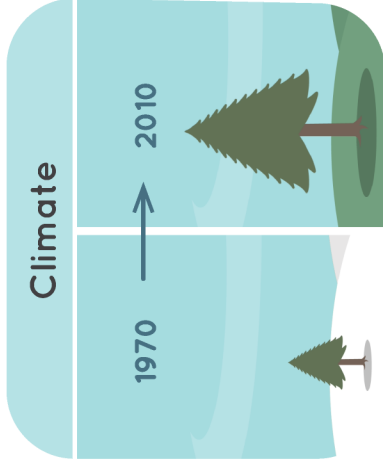
How do we know Earth's climate is getting warmer?

Scientists have been observing Earth for a long time. They use NASA satellites and other instruments to collect many types of information about Earth's land, atmosphere, ocean, and ice. This information tells us that Earth's climate is getting warmer.

What does carbon have to do with it?

Carbon is in all living things on Earth. As plants and animals die, they get buried in the ground. After enough years, these squished underground remains can turn into fossil fuels, such as coal and oil. When we burn those fuels, the carbon that was in the ground goes into the air as a gas called carbon dioxide, or CO_2. Plants and trees can absorb some of this extra carbon dioxide. But a lot of it stays in the atmosphere as a greenhouse gas that warms up the planet.
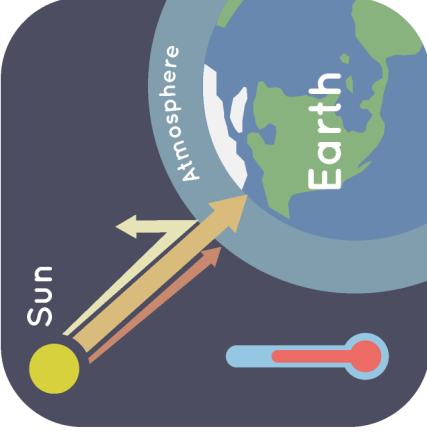
What is the difference between weather and climate?

The main difference is time. Weather is only temporary. For example, a blizzard can turn into a flood after just a few warm spring days. Climate, on the other hand, is more than just a few warm or cool days. Climate describes the typical weather conditions in an entire region for a very long time — 30 years or more.
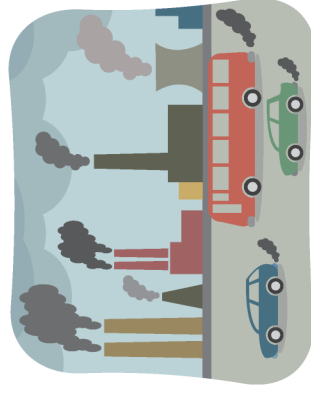
Weather

Why is Earth warming?

Some of the gases in Earth's atmosphere trap heat from the Sun — like the glass roof and walls of a greenhouse. These greenhouse gases keep Earth warm enough to live on. But human activities, such as the destruction of forests and burning fossil fuels, create extra greenhouse gases. This traps even more of the Sun's heat, leading to a warmer Earth.

Sun
Atmosphere
Earth

Has the climate ever changed before?

Yes, but this time is different. Over millions of years, Earth's climate has warmed up and cooled down many times. In the past, Earth often warmed up when the Sun was very active. But nowadays, we can carefully measure the Sun's activity. We know Earth is warming now, even when the Sun is less active. Today, the planet is warming much faster than it has over human history.

It doesn't feel hotter where I live. Why does climate change matter?

The average air temperatures near Earth's surface have gone up about 2 degrees Fahrenheit in the last century. A couple of degrees over a hundred years may not seem like much. However, this change can have big impacts on the health of Earth's plants and animals.
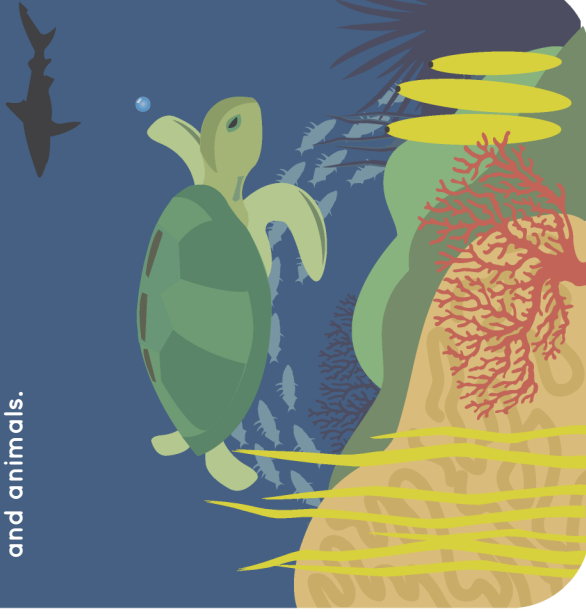
What does climate change do to the ocean?

As Earth warms, NASA has observed that sea levels are rising. This is partly due to melting ice. Glaciers and ice sheets are large masses of ice that sit on the land. As our planet warms, this ice melts and flows into the oceans. More water in the oceans makes sea level higher. Also, water expands as it gets warmer. So, warm water takes up more room in our oceans — making sea levels higher.

The properties of ocean water are also changing. One change is called ocean acidification and it can be harmful for plants and animals. Scientists have observed that the ocean is becoming more acidic as its water absorbs carbon dioxide from the atmosphere.

How are scientists studying climate change?

Scientists study Earth's climate using lots of tools on the ground, in the air, and in space. For example, NASA satellites are orbiting Earth all the time. They measure carbon dioxide in the atmosphere. They monitor melting ice and measure rising seas and many other things, too. This information helps scientists learn more about Earth's changing climate.
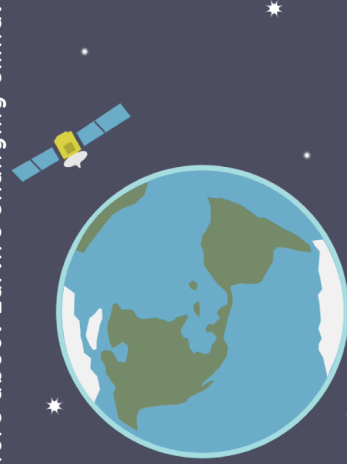
What can I do?

Climate change seems big, but it's something that we can learn about and work on together! NASA's scientists are studying and monitoring climate change — and there are a few ways you can help them learn more.

Learn. Have more questions about climate change? Read, play, and watch more about it on the NASA Climate Kids website: **climatekids.nasa.gov**

Do. Want to collect real data for climate scientists? Check out these NASA citizen science projects to see how you can contribute to what we know about our planet: **science.nasa.gov/citizenscience**

Some examples include:
• Globe Observer
• Community Snow Observations
• Air Quality Citizen Science

Panda Fork Art

Panda Fork Art

Materials:
- Construction paper
- Fork
- White paint
- Scissors
- Glue

We love our Panda arts and crafts! Here is another fun way to make your own Panda at home.
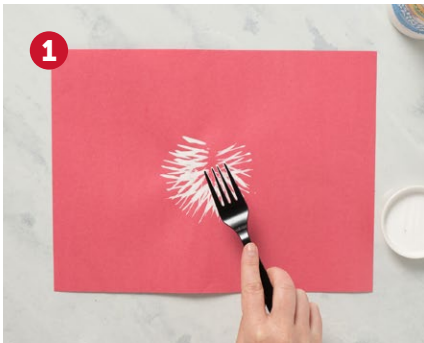
Dip your fork into the white paint. Then press it into the construction paper, pulling away from the middle to make a round shape.

Cut out ears, a nose, a mouth, and pupils to glue on. You can also use googly eyes if you have them.

Let dry. Now you have the cutest panda bear around!

Capture the Bamboo Game

This game is similar to "Capture the Flag" and is best played outside where there are areas available to hide the "bamboo." The first team of pandas to capture the bamboo is declared the winner.

Materials
Large playing area
Two flags
Cones

Set-up
Determine the playing boundaries.
- Divide the space in half (using cones to mark the dividing line) to create territories for each team.
- Within each territory, determine a location for "the cage."
- Divide the class into two equal teams – "Giant Pandas" vs. "Red Pandas" .
- Choose two students to be "poachers" (explained below).
- Choose two identical items to serve as the "bamboo."
  - Brightly colored, preferably green
  - Approximately one foot long

Playing the Game
- Each team will retreat into their territory and hide their bamboo (should be visible
- from 20 ft away on at least one side).
- As a team, students will decide if they are a "forager" or a "defender"
  - Forager: sneak into the opposing team's territory, locate the bamboo, capture it, and return to their territory without being caught
  - Defender: Protect the bamboo and catch opposing players (by tagging below the shoulders).
- Players who are caught by defenders are taken to "the cage." They can be released by being tagged by a team member. Both team members must immediately return to their territory. Only 1 student can be freed at a time.
- Poachers:
  - Their job is to capture as many pandas (from both teams) as possible
  - Once a panda is captured, the poacher must escort the panda to the opposing team's "cage"

Winning the Game
- The game is won when one team successfully captures the other teams' bamboo and is able to bring it back to their territory without being caught
- If a player is caught with the bamboo, they are sent to "the cage" and the bamboo is returned to its hiding spot.

Save the Pandas Campaign

Objective: Girls will learn how to work together to raise awareness about the issues facing giant pandas and the action we need to take to save them.

With only an estimated 1,600 giant pandas left in the wild today, it is time to stand up and save the giant pandas before they disappear forever. Young people today are more socially conscious than prior generations and have the power to make a difference by influencing their community. In this lesson, girls will work together to create a campaign with the goals of raising awareness about the giant pandas and conservation and instigating change in their school and community

Step 1: On the board/chart paper, write the word "conservation" in the center. Allow girls time to think about what these words mean to them (or have them write their ideas down on paper). Then, invite girls to write words that they associate with "conservation" on the board/chart paper.

Step 2: Once everyone's ideas have been shared, engage the troop in a discussion about conservation, including how it relates to the endangered giant panda, allowing their questions and comments to direct the discussion.

Step 3: Introduce girls to campaigns, including the definition, their purpose, how to prepare a campaign, and the keys to a successful campaign (e.g. effective word choice, engaging storyline, target audience, etc.). Provide girls with examples of successful campaigns (e.g. banning the use of the pesticide DDT and the subsequent recovery of the bald eagle population) and unsuccessful campaigns (e.g. City of Toronto's attempt to ban the sale of shark fins). "Unless someone like you cares an awful whole lot,nothing is going to get better, it's not." ~ Dr. Seuss

Step 5: As a troop , brainstorm possible campaign topics and mediums (see "Campaign Ideas" for suggestions). This activity should be left open ended so that girls can choose the best medium for them to get their message across. The campaigns may be specific to giant pandas and steps we can take to conserve them or girls can create a more generalized campaign that focuses on what we can do in our everyday lives to help protect the environment, using the giant panda as an example of an animal "at risk" due to our actions.

Step 6: Assign groups or allow girls to choose based on their campaign ideas. Group size can vary, but two to three girls per group is ideal.

Step 7: Allow girls time to research, plan, create, and implement their campaigns. Meet regularly with each group to ensure that girls are on the right track. Have girls share their campaigns within the troop and possibly their schools.

Campaign Ideas

To get you started on the "Save the Panda Campaign", here are some campaign ideas. These are only suggestions and girls are likely to be more engaged in the project if they have a say in their campaign, so be sure to hold a brainstorming session with the troop.

- Write and send a persuasive letter to government officials or other relevant people
- Print
  - Poster
  - Newspaper/magazine
  - Brochure
  - Flyer
- Public Service Announcement
  - Radio
  - Television
    - Girl actors
    - Stop-motion animation
    - Cartoon
    - Picture Slideshow
- Public lecture/speech
- Internet
  - Blog
  - Social Media
  - Informative website

Panda "Trash" Art

The giant panda has become an internationalsymbol of wildlife conservation efforts.

Worldwide, people recognize the giant panda asa critically endangered species that is at risk ofgoing extinct. In this lesson, girls will work together to create a giant panda "sculpture" made entirely from recycled and reused materials.

Using recycled and reused materials, girls will explore their creative side while creating giant panda "sculptures."

Materials

- Hot glue guns, white glue, and/or tape
- A large quantity of recycled and reused materials (e.g. egg cartons, cardboard, toilet paper rolls, old CDs, magazines/newspaper, bottles, plastic bags, etc.)

Step 1: View images of iconic sculptures and discuss each one (e.g. the feelings the sculptures convey, the purpose they serve, the materials they were made of, etc.). Be sure to include some images of sculptures created from "trash." A quick internet search will provide you with many images to use.

Ex: Andries Botha's recycled elephant at The Hague; Panda Sculpture

Step 2: Girls will be creating their own "trash" art masterpieces that relate to giant pandas. Depending on time constraints, materials available, and space, this activity can be done as a whole troop, small groups, pairs, or individually. At some point during this project, there should be a discussion about recycling/reusing materials and its importance to conservation efforts worldwide (not just panda related).

Panda Pancakes

Ingredients

- 1 1/2 cups Pancake Mix
- 1/2 cup Nutella® hazelnut spread
- 8 slices banana
- 12 blueberries

From Pearl Milling Company

Instructions

1. Prepare pancake mix according to package directions. Cook pancake batter according to package directions, making four 1/3 cup pancakes, four 1 tbsp pancakes and sixteen 1 tsp pancakes.

2. Place each of the large pancakes on a plate for the panda bear's face. Arrange 1 medium-size pancake in the lower third of the face to resemble the bear's snout. Use some hazelnut spread to keep the snout in place and dollop some on top to resemble the panda bear's nose.

3. Spread all smaller pancakes with hazelnut spread. Arrange 2 on the face for the bear's eyes and another 2 on top of the head for ears. Arrange slice of banana and blueberry on top of smaller pancakes for each of the bear's eyes. Place one blueberry on top of hazelnut spread on snout to resemble nose.

4. To pipe panda bear's smile with Nutella®, add some of the spread to piping bag or resealable plastic bag with small corner snipped.

Panda Pastries

Ingredients

- Flour to dust your cutting board
- 1 box Pillsbury Refrigerated Pie Crusts (2 crusts), thawed
- 3/4 cup Nutella
- 1 tablespoon milk or egg white

Supplies

- Cutting board
- Panda Bear Cookie Cutter or stencil
- Pastry brush
- Baking sheet covered in parchment paper

From Hungry Happenings

Instructions

1. Preheat oven to 400 degrees Fahrenheit.
2. Dust the cutting board lightly with flour.
3. Unroll thawed pie dough on the board.
4. Cut 24 panda bear heads out of the two pie crusts, re-rolling scraps as needed.
5. Spoon about a tablespoon of Nutella on 12 of the panda bear heads leaving at least ¼ inch border.
6. Use the facial features cutter to cut eyes, ears, and nose out of the remaining 12 panda bear heads.
7. Brush milk around the edges of the backside of those dough pieces and press on top of a Nutella-covered panda head.
8. Press down all around the edges to secure the two pieces of pie dough together.
9. Panda bear pastries baked on a parchment paper-lined baking sheet.
10. Set panda pastries on a parchment paper-lined baking sheet and bake for 7-10 minutes until golden brown.
11. Serve hot or cold.

Panda Doughnuts

Ingredients

- cooking spray, for the doughnut pan
- 3/4 cup all purpose flour
- 3 tablespoons unsweetened cocoa powder
- 1/2 teaspoon baking soda
- 1/4 teaspoon salt
- 3 tablespoons unsalted butter, warmed
- 3 ounces dark chocolate chips
- 1/2 cup brown sugar
- 1 large egg yolk
- 1/2 cup buttermilk
- 6 mini Oreos, halved
- 1 cup white candy melts
- 1/4 cup black or brown candy melts

From I am a Food Blog

Instructions

1. Preheat the oven to 400°F. Lightly spray a 6 count donut pan with cooking spray
2. In a bowl, whisk together the flour, cocoa powder, baking soda and salt.
3. In a separate large bowl, add the chocolate chips to the melted butter. Stir until the chocolate is melted completely. Stir in the sugar and egg yolk until well mixed. Add the buttermilk and mix until smooth.
4. Add the dry ingredients to the wet and mix until there are no streaks of flour, being careful not to overmix. Pipe evenly into the donut pan. Bake for 7-10 minutes or until firm.
5. Cool in the pan for 1 minute, then flip the pan and gently coax the doughnuts onto a cooling rack. Let the doughnuts cool completely.
6. Melt the candy melts according the instructions. Dip the doughnuts in the white and let set. Pipe on eyes and a mouth. Gently use a knife to cut slits into the doughnut where the ears should go. Dip the Oreos into a tiny bit of candy melt and slide into position. Enjoy!

Newspaper Panda

Materials

- Newspaper
- Scissors
- Black construction paper
- Stapler with staples
- Black Sharpie marker
- Glue stick
- 2 Large googly eyes (self-adhesive 25mm)
- Panda Craft Template.*

Instructions

1. Find a piece of newspaper that is mostly print with few pictures and no color. You will need at least a half sheet.
2. Fold a half sheet of the newspaper in half and cut a large circle through both layers.
3. Print the panda craft template and use it to cut the pieces out of black paper. If you don't have a printer, you can free hand the shapes.
4. Sandwich the ears in between the 2 layers of newspaper circles.
5. Secure each ear with one staple to begin.
6. Now continue to staple all around the circle, keeping the staples close together, but not touching.
7. Leave a section of the panda's head open at the bottom, wide enough to stuff in crumpled pieces of newspaper.
8. Use the glue stick to put his black eye patches and nose in place.
9. Then use the black sharpie marker to give your panda a smile.
10. Put the large googly eyes in place. If they are not self-adhesive, use the glue stick. If you prefer or if you do not have googly eyes, cut eyes out of white construction paper, draw in the eyeballs and glue them in place.
11. Tear strips of newspaper and crumple them up. Then begin to gently fill the inside of the panda craft by putting crumpled pieces of newspaper in one at a time.
12. Finally, use the stapler to close up your panda.

PANDA CRAFT TEMPLATE
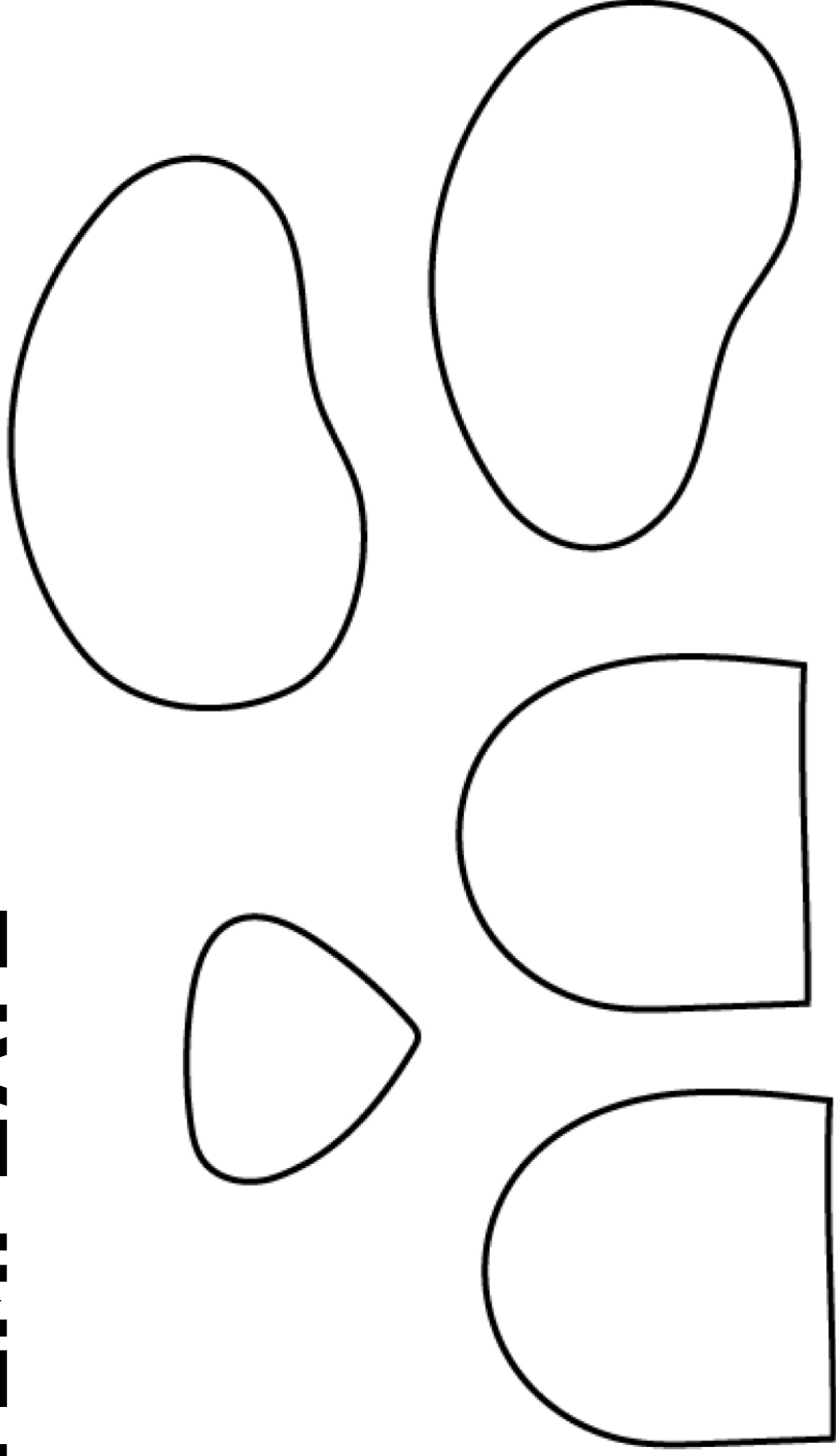
Write in Chinese

Pandas, with their iconic black and white fur and playful nature, have a long history in Chinese culture, dating back to ancient times when they were considered symbols of peace and friendship.

Today, pandas continue to hold strong ties to Chinese culture, with their image being used in everything from national pandas to Chinese symbols. Their presence also plays a significant role in China's tourism industry and conservation efforts. Overall, pandas hold a very special place in Chinese culture, symbolizing harmony, friendship, and national pride.

Over 300 languages are spoken in China. 70% of the population speaks Mandarin as their first language.

Panda in Chinese is pronounced as xióngmao) in Mandarin. Practice writing the Chinese characters that make up the word panda.

Want to learn more? Watch a video to learn how to say other animals in Chinese.

熊貓

Panda Headband

Materials

- Plain thin headband
- Black felt
- Hot glue gun

Instructions

1. Cut out ear shapes with tags at the end (they end up looking kind of like mushrooms) from either felt or polar fleece.

2. Split the tag part up the center to the base of the ear. Cross the two little legs and glue them together at the end.

3. Arrange the ears along the headband. Panda ears are spread pretty far apart. If you put them too close together near the top, you'll get something more mouse like.

4. Once you've got them where you want them, wrap the tags around the band and glue them down with hot glue.