Teacher Resource

New Pandas

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

1. What zoo in Australia has pandas?
2. What are the names of the new pandas?
   a. Wang Wang and Fu Ni
   b. Xing Qiu and Yi Lan
   c. Yun Chuan and Xin Bao
3. How much did it cost the zoo to loan the pandas from China?
4. How many pandas live outside of China?
5. What was surprising about this story?

Activity: Class discussion

Before watching the BTN New Pandas story students will respond to the following…

- What do you know about pandas? Record your ideas on a mind map.
- Where do pandas live? Refer to a map and mark where you think pandas live.
- What is special about pandas?
- What do you think this BTN story will be about?
- What more do you want to learn about pandas?

After watching the BTN New Pandas story, ask students to respond to the following:

- What does this video make you WONDER?
- What did you LEARN watching the story?
- What did you find SURPRISING?
- What QUESTIONS do you have? Think of three questions you have about the BTN story.

Activity: KWLH Organiser

Discuss the information raised in the BTN New Pandas story. What questions were raised in the discussion and what are the gaps in students' knowledge? The following KWLH organiser provides students with a framework to explore their knowledge on this topic.

What do I **know**?	What do I **want** to know?	What have I **learnt**?	**How** will I find out?

Students will develop their own question/s to research or choose one or more of the questions below. Encourage students to collect and record information from a wide variety of sources and present the information they find in an interesting way.

- Where do giant pandas live? Explore their natural habitat and mark where they live on a map.
- What are some unique features of giant pandas? Explore its features and write a detailed description.
- What is the scientific name for giant pandas? What is the meaning of their scientific name?
- Explore the taxonomy of giant pandas and categorise the information you find using the classification system.
- What is panda diplomacy? Use a timeline to show examples of panda diplomacy throughout history.
- Which countries have pandas on loan from China? Highlight the location of panda ambassadors on a world map.
- Investigate was the journey for giant pandas, Xing Qiu and Yi Lan and the role of the zookeepers that helped them. Highlight their journey on a map and calculate the distance.
- Where can giant pandas be found in the wild? Find their natural habitat on a map.
- Why are pandas important to Chinese culture? Give 3 examples.
- Create a species profile on the giant panda. Include its name (common and scientific name), classification (class, family, genus), description, habitat, diet and threats.
- What has caused the giant panda population to decline? Use a cause-and-effect fishbone diagram to present your findings.
- What is the cost to loan a panda from China? Calculate the cost of keeping a giant panda (including yearly lease, food, maintenance and cost of enclosure).

Activity: Habitat

This literacy activity demonstrates students active listening and interpreting skills. Students will listen to a description of a panda's habitat and create a simple black and white artwork illustrating its habitat. Teachers will use the following as a guide for this activity.

- Find a description of a [giant panda's habitat](#) to read aloud to your students.
- Read the description of the panda's habitat aloud to your class, reading the description 2 or 3 times.
- Students will take notes and write down key words as they listen.
- Students will illustrate the habitat using only a black felt—tip pen (0.4 or 0.6) on a piece of A4 art paper. Students will include as much detail as they can.
- Display the student's artwork in a school exhibition.
- Challenge students by asking them to recreate the habitat as a diorama or a virtual reality experience using Minecraft.
- Challenge your students by asking them to design and create a model of a giant panda zoo enclosure.


Activity: Design a Zoo Enclosure

In this activity students will research the natural habitat of giant pandas, including their needs and environmental factors. Students will then design a zoo enclosure which incorporates key elements of their natural habitat whilst also considering the needs of the zoo environment.

Explore and Observe
Students will explore the natural habitat of giant pandas making as many notes as they can and then list the main features of the habitat (e.g. climate, plants, landscape). Students will then think about how they might be able to integrate these features into a modern zoo enclosure for a panda.

To learn more about panda behaviour and their needs students can visit one of the many panda enclosures via a panda cam! There are several live cams setup in zoos around the world that allow you to watch pandas as they explore their indoor and outdoor habitats.

Live Panda Cams!
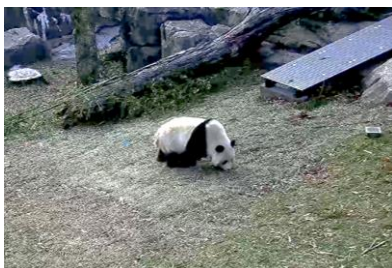
Smithsonian National Zoo – Panda Cam ([link](#))

Live cam at the Shenshuping Gengda Panda Centre, China ([link](#))

San Diego Zoo Giant Panda Cam ([link](#)) Email required to access

Observation

As a class or individually, students will observe pandas in a zoo enclosure and respond to the following

- What is the panda doing? How does it interact with the environment? Record the behaviour of the panda.

Research and Design

Students will use the following to guide them through the research, development and design process.

How will your zoo enclosure meet the needs of the panda?

- What are some important things that pandas need to live comfortably?
- How much space does the animal need? Think about area, perimeter and volume.
- What features will the enclosure need to meet the needs of the animal (food, sleep, water, privacy, shelter, play)?
- What are some of the animal's adaptations? How can you incorporate these into your design (their need for shade, climbing structures, and enrichment items)?
- What materials will be used in the enclosure (rocks, plants, glass, fencing)?

How will your zoo enclosure meet the needs of people?

- What signage will you need?
- What educational information will you include (common and scientific name of animal, map of where the animal lives in the wild, conservation status)?
- Can visitors easily see the animal?
- How will zookeepers access the enclosure (to clean, feed the animal)?
- Is the enclosure safe and secure?

Design

- Draw a sketch of your design. Include a drawing which is looking down on your enclosure to show the position of key features.
- What materials will you use to build your model enclosure? Try to use recycled materials from home and/or school.
- What will be the scale of your model (the overall size should be no bigger than a shoebox)?
- Create a 3-dimensional model of your panda enclosure. Alternatively, create a digital model of your enclosure in Minecraft.

Present

students will present their zoo enclosure designs to the class, explaining how their design incorporates key elements of the panda's natural habitat and how it meets the panda's needs.

Activity: Quiz

1. Ginat pandas are native to China.

A. True

B. False

2. Panda cubs born outside of China have to be returned to China.

A. True

B. False

3. What percent of a giant panda's diet is bamboo?

A. 77%

B. 88%

C. 99%

4. Bamboo contains a lot of nutrients.

A. True

B. False

5. What are the names of the new pandas at Adelaide Zoo?

A. Yu Chuan and Xin Bao

B. Wang Wang and Fu Ni

C. Xing Qiu and Yi Lan

6. Panda behaviour is generally…

A. Solitary and peaceful

B. Social and confrontational

C. Cuddly and unintelligent

7. Why are pandas black and white?

A. Camouflage and communication

B. To attract a mate

C. To scare off predators

8. What type of habitat do wild giant pandas live in?

A. Temperate forest

B. Tropical rainforest

C. Arctic forest

9. What is the conservation status of giant pandas?

A. Endagered

B. Vulnerable

C. Extinct in the wild

10. What is the population of pandas in the wild?

A. 184

B. 1,864

C. 8,641

Quiz Answers:
1A, 2A, 3C, 4B, 5C, 6A, 7A, 8A, 9B, 10B.

Useful Websites

- [Panda Diplomacy](#) – BTN
- [Giant Panda – Xing Qiu and Yi Lan](#) – Adelaide Zoo
- [Two new pandas, Yi Lan and Xing Qiu, arrive in South Australia, but there are politics behind them](#) – ABC News
- [Habitat of the Panda](#) – WWF