

Chinese Alligator Tunnels



Engage and Reflect

Watch *Virtual Vitamin Z - Discover More About Chinese alligators*

<https://www.youtube.com/watch?v=FWY52gtKHjA>



Skills

- Creativity
- Engineering
- Spatial reasoning
- Developing and using models
- Empathy



NGSS Science and Engineering Practices

- Engineering design
- Earth's systems



Experience

- 30-60 minutes
- 1 or more people

Chinese alligators make complex tunnel systems underground to live in. You can create your own Chinese alligator tunnel by repurposing household materials like cardboard boxes to engineer your own tunnel system, then recreate life-sized models using furniture and bedding. Take on the role of chinese alligator crawl and see what it is like to move from one chamber to the next using the network of tunnels.



Celebrating and Saving Wildlife

The Detroit Zoological Society is part of many Species Survival Plan (SSP) programs with the Association of Zoos & Aquariums. SSP programs coordinate the management and conservation of species in zoos and aquariums, ensuring the sustainability of a healthy, genetically diverse and demographically varied populations. These animals, and their descendants, can be used to re-establish populations, like the Chinese alligators, who are currently critically endangered.



Take Action

The Detroit Zoological Society's A.D.O.P.T.S. program provides an opportunity for you to support endangered species around the world and our mission of Celebrating and Saving Wildlife! Your symbolic animal adoption will support the conservation of animals at the Detroit Zoo as well as endangered species around the world.



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Tools

Recycled building materials like cardboard, paper towel tubes tubes, cans etc,

Tape

For life-size models: use furniture, sheets and towels

1 or more people

Directions

- Using recycled materials design a tunnel system for a Chinese alligator. Include a minimum of three chambers or rooms.
- Use long tubes to connect the chambers.
- Make sure your room includes at least one entrance and one exit.
- Once you are happy with your design, use furniture like tables and chairs to recreate a life-size model of your design.
- Use bedding and towels to cover your tunnel system and recreate the dark environment of the underground tunnels that Chinese alligators call home.
- Crawl through the tunnels taking on the role of the alligators.

Notes - For more of a challenge, add more chambers and tunnels or add additional entrances and exits. Try building your life-size model to scale. Compare the lengths of your tunnels and your chambers on your small model to figure out the ratio. Build your life-size model to the same ratios. A Chinese alligator is 5 feet tall, how much space do you think would make a comfortable tunnel system for them?