



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

learn about mammals, then use the engineering design process to create a model of one.



Supplies Required:

Graphic organizer
Plastic bottle
Toilet paper roll
Bottle caps
Foil
Masking tape
Balloon

Newspaper
Flour
Water
Bowl
Paint
Paint brush
Scissors

Video

Watch this video and learn about mammals: <https://tinyurl.com/y24o335v>

Overview

Have you ever heard of mammals? Can you think of a mammal from the top of your head? What makes an animal a mammal? All mammals are warm blooded, their body temperature stays pretty much the same all day long. All mammals also give birth to their babies/young and nurture them with milk. All mammals have hair, and three tiny middle bone ears. Many animals such as dolphins, elephants, bears, dogs, and cats are all mammals. Choose your favorite mammal and try to create a model of it using the materials available.



Instructions

1. **Problem** - What do we want to solve? How can we create our mammal with the materials given?
2. **Solution** - What are some ways to solve the problem? Draw and talk about your model design with your peers. Think about what materials will be used to make the foundation of the mammal.
3. **Model** - Build your design! Construct your model following to design you drew in the Solutions.
4. **Test** - Does your model work? Does your model have the same characteristics as the mammal you chose?
5. **Reflect & Redesign** - Was your model successful? Does it need to be redesigned? Share and discuss your model with your peers.

Additional Resources

1. Learn more about different mammals with the Lincoln Park Zoo: <https://tinyurl.com/y42j95yw>

Share It Out

Share on social media: Share your mammal model on social media. Share with your friends and family what you learned about mammals and what makes them special! Use these hashtags:

#ModelMaking
#ProjectExploration
#STEMatHome

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634

www.projectexploration.org