



Smithsonian

Solving Problems at the ZOO



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All in a Day's Work

Life at the Smithsonian's National Zoo is fun! **Keepers** work hard to make it that way.

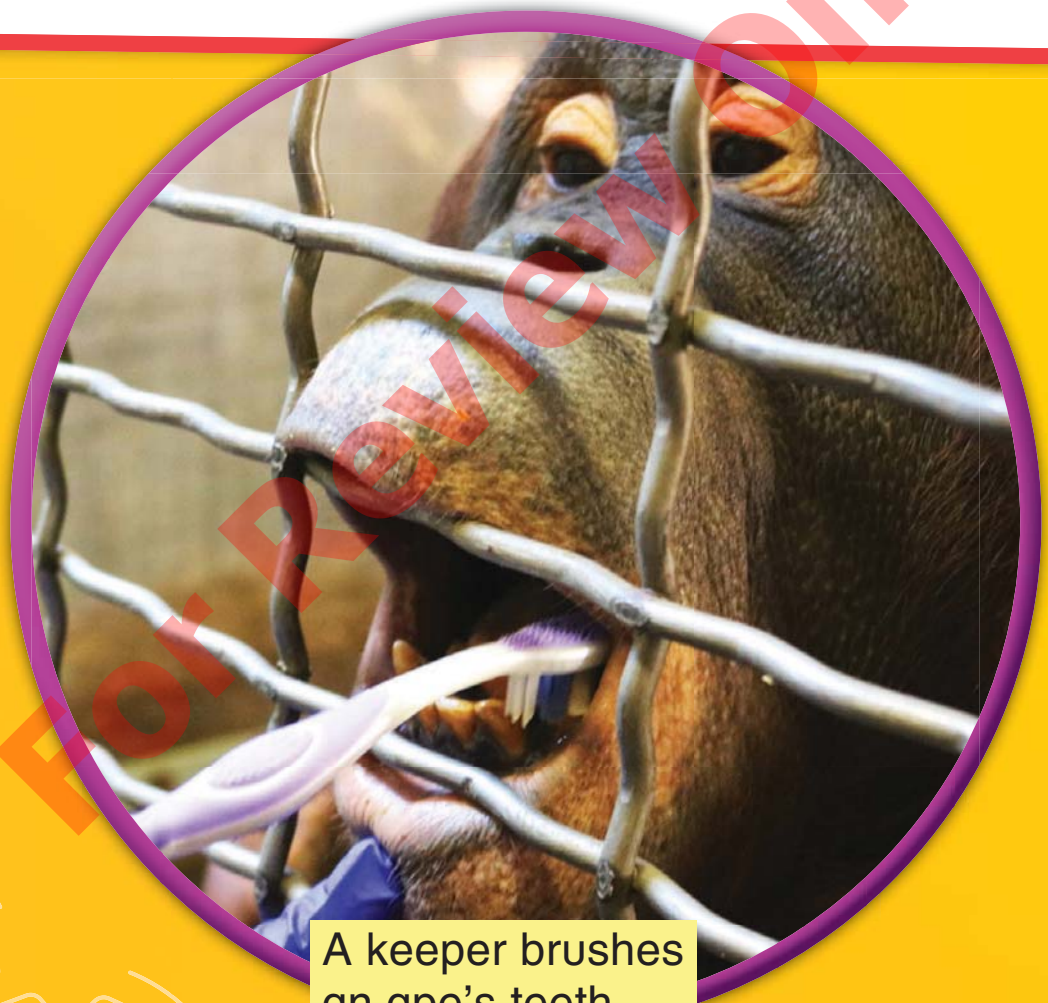


Keepers gave this tiger a ball to play with.



Bear cubs play at the Smithsonian's National Zoo.

Keepers take care of animals.
They feed them. They keep
them safe. Keepers also
make sure animals have fun!



A keeper brushes
an ape's teeth.



A keeper gives an alpaca treats while the alpaca paints.



A keeper trains lemurs to stand so she can study them.

Making It Work

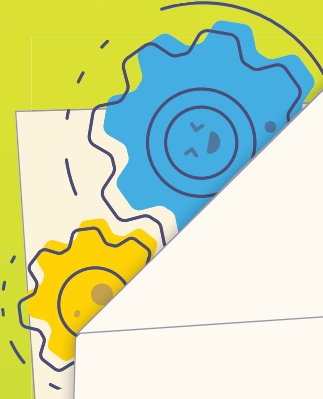
Keepers face problems each day. They must find the best ways to do their work.



A keeper measures meals for different animals.



A keeper trains a goat to touch a ball so she can check the goat.



STEAM CHALLENGE

The Problem

You and your friend have new jobs at the zoo. You must feed a bird called a finch. Your task is to make a bird-feeding hat. One of you will wear the hat while the other checks the bird!

The Goals

- Design a hat you can wear so that it holds one big spoonful of bird food.
- Design a place on your hat for the finch to land and eat.
- Design a strong enough hat to hold both the bird feed and a coin to represent the finch.





Research and Brainstorm

What do finches eat? How much does a finch weigh? What coin is about that same weight?



Design and Build

Draw your plan. How will it work? What materials will you use? Make your bird-feeding hat!



Test and Improve

Put bird feed in the hat. Add the coin. Does it hold? Does anything fall? Can you make it better? Try again.



Reflect and Share

How many finches could you feed on your hat at one time? Is there something else you could make that would be better for feeding and checking a finch?