

Helping Animals Learn

Animals know how to take care of themselves. But sometimes, they need help! Animal keepers have found great ways to help animals learn and grow.



Animals



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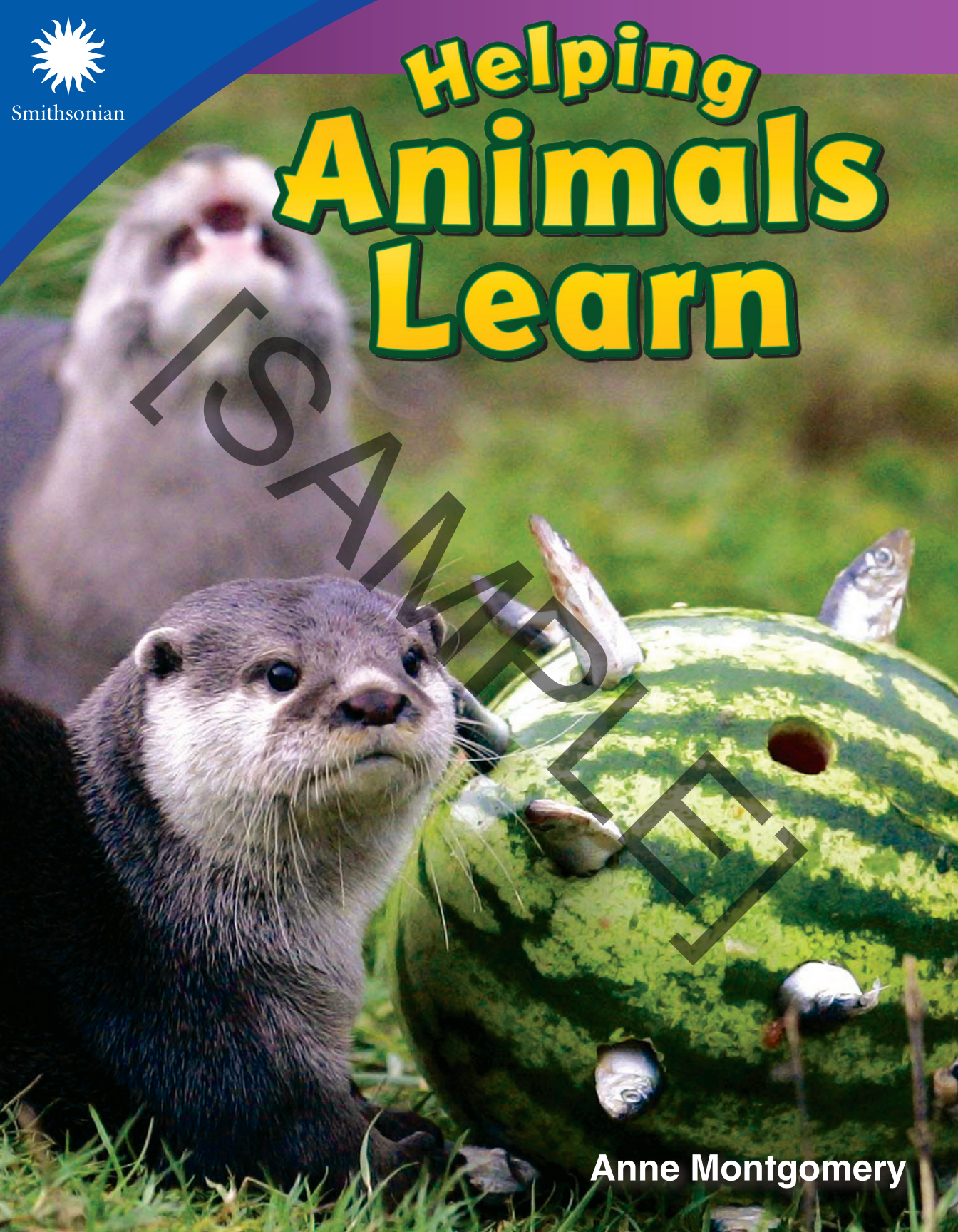


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Helping Animals Learn



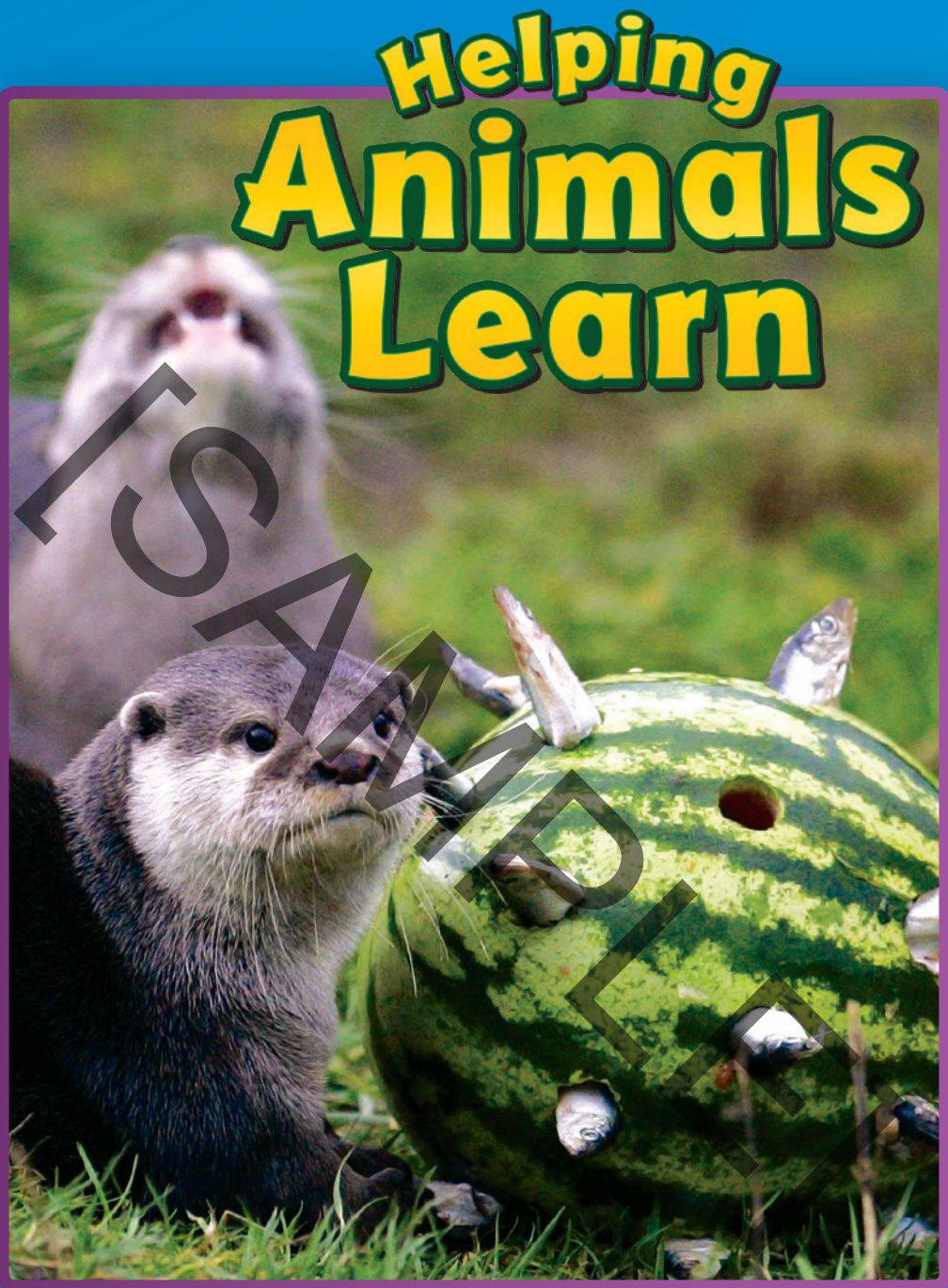
Anne Montgomery

[SAMPLE]

Think and Do

1. How can people help animal babies learn?
2. Should people teach animals? Or, should they let them learn on their own?





Anne Montgomery

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Play and Learn

When babies play, they learn. They learn what their bodies can do. They learn how to solve problems.

The same is true for animal babies. Puppies, kittens, and other pups learn as they play.



A baby plays with a toy.




A kitten plays with a toy.

Teachers

Parents teach their children.
They help them learn what
they need.

Animal parents are the best
teachers for their young. But
life in the wild can be hard.
Some parents die. How do
babies learn then?



Parents teach their
child to walk.



Giraffe parents care for their young.

Human Help

Keepers help young animals learn. First, they put the babies in safe homes. They fill those places with sights and sounds that the babies would find in the wild.



A keeper works with a cheetah cub.

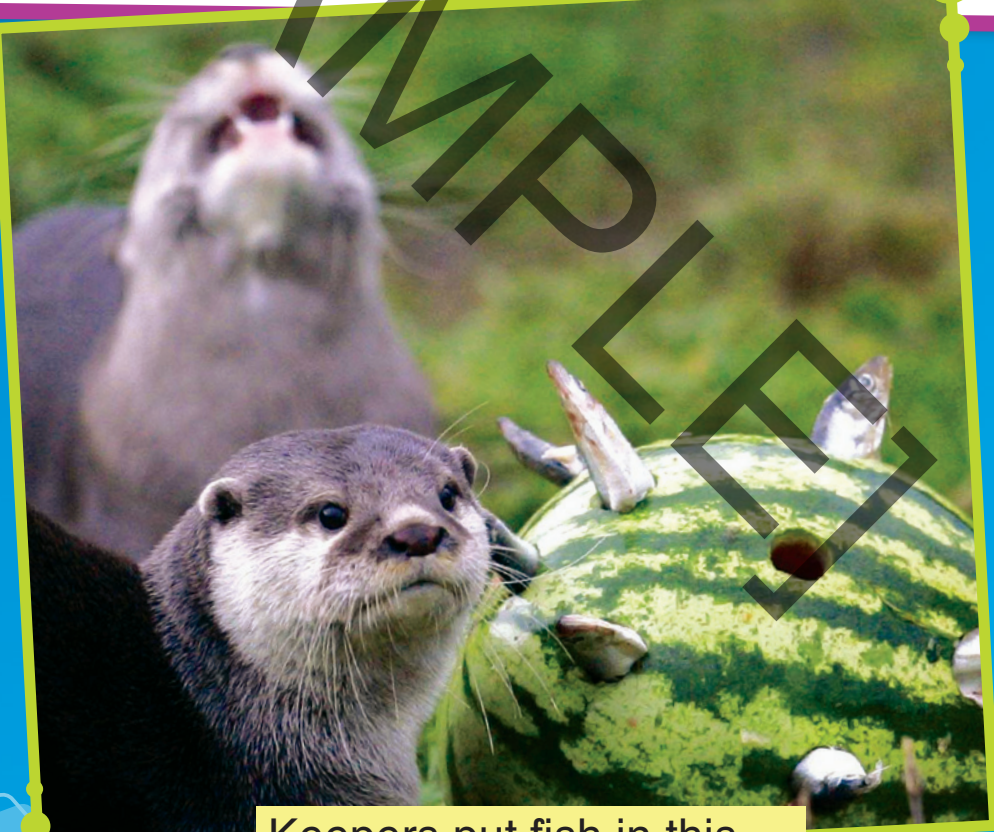


Science

Modeling

Parents show babies what to do and how to act. This is called *modeling*. Babies see what the parents do. In time, they copy their parents and do it too.

Keepers also fill these living spaces with things to do. They help babies learn how to search for food. They have toys that help babies learn what they need to know.



Keepers put fish in this watermelon for the otters.



Arts & Mathematics

Design Matters

There is an art to making toys for animals! It matters how the toys look and feel. It matters what shapes and sizes they are. That way, animals can learn from them.

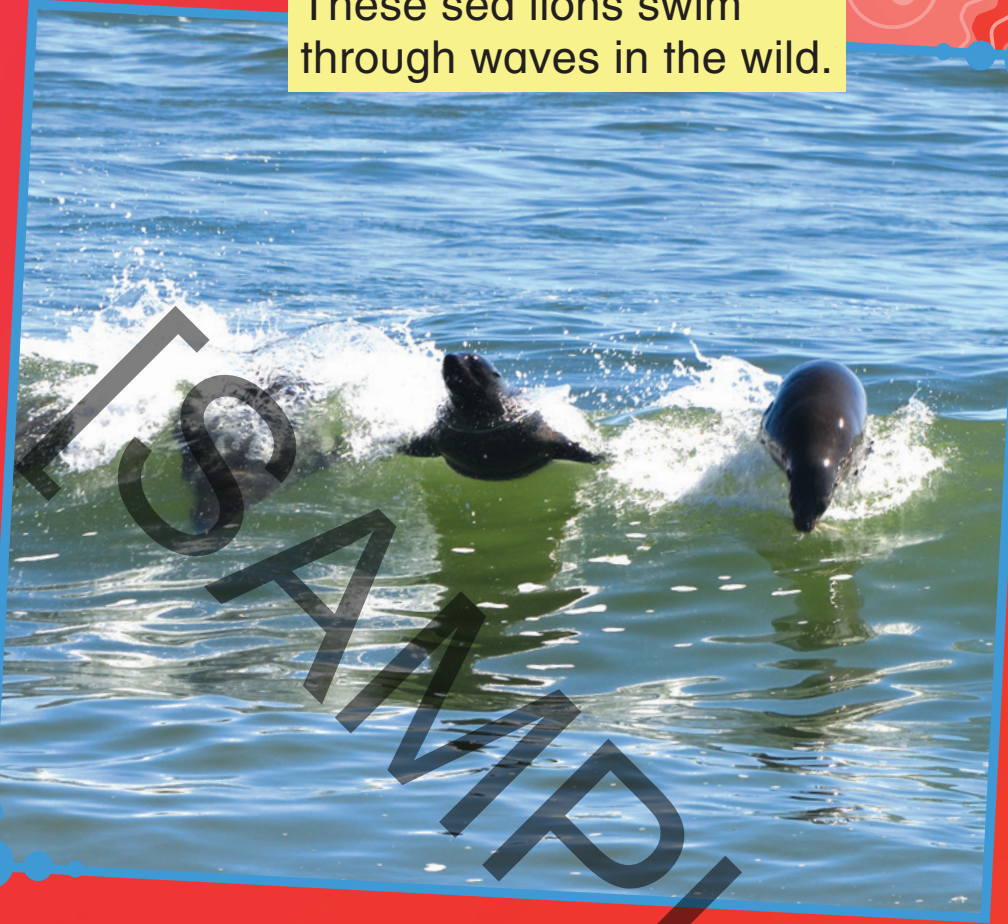
Helping Stories

Humans can find fun ways to help animals learn. Look at these sea lions. Two giant pools have been made for them. Wave **machines** make the sea lions feel like they are in the wild.



A keeper feeds a sea lion in a pool.

These sea lions swim through waves in the wild.



Technology & Engineering

Making Waves

Machines in pools can make waves! They can blow on or paddle the water. Or, they can suck in the water and then let it out. These actions cause waves to form.

These gray wolves live in the National Zoo. Their home is made to look like the wild. The wolves climb on logs. They can also learn to hide in plants like they would in the wild.



gray wolf pup



Coby and Crystal live at the Smithsonian's National Zoo.

Keepers make sure beavers have tree **trimmings**. Beavers chew on them and build with them. Beaver parents show how to build homes with trimmings, just like in the wild.



A beaver carries a tree branch.



This beaver chews on a tree.

Learn and Grow

All babies must learn how to act. They learn by playing and working. They learn by watching others.

People can help animals learn and grow. And people can learn a lot from animals too!

A keeper checks a sea lion.





An ape shows how to
get food out of a box.



STEAM CHALLENGE

The Problem

Bird nests near you have been damaged. Luckily, you have been watching the birds and know how to build new nests. Can you model building nests for the younger birds?

The Goals

- Build your model with any items from nature that you can find.
- Build a nest that can hold an egg.
- Build your model so that it can hold a 1-kilogram (2-pound) bag of rice without breaking.





Research and Brainstorm

What is modeling? Where do birds like to build nests? What are some things that keep a bird's nest safe?



Design and Build

Draw your plan. How will it work? What materials will you use? Build your model!



Test and Improve

Place a 1 kg (2 lb.) bag of rice on your model. The model should stand for at least one minute without breaking. Did your model stay whole? Can you make it better? Try again.



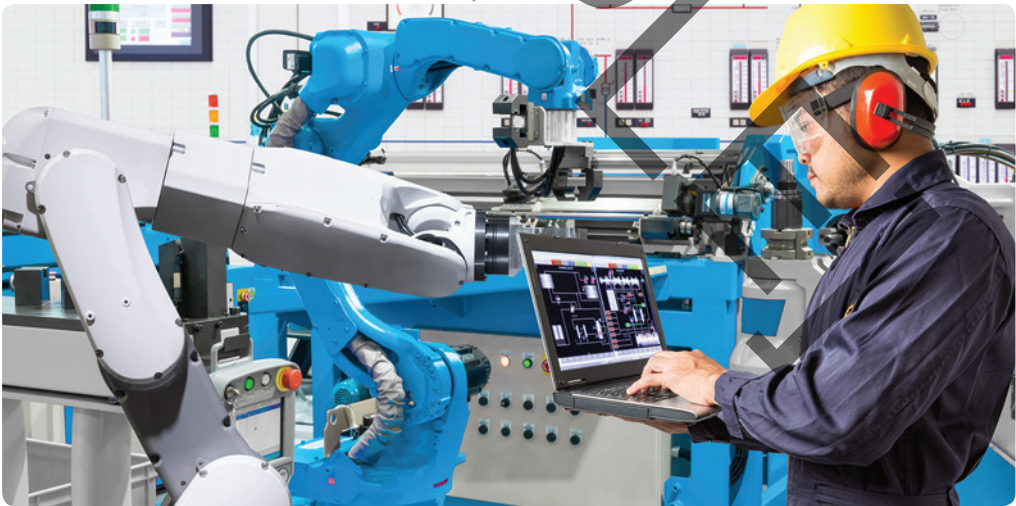
Reflect and Share

Why should people help animals when animals have lost their parents? Are there other ways to help animal babies?

Glossary



keepers



machines



trimmings

Career Advice

from Smithsonian

Do you want to work with animals?

Here are some tips to get you started.



“Watch animals, especially wildlife, without disturbing them. See how they act. This will make sure they are well cared for.” — **Chris Crowe, Animal Keeper**

“I became interested in becoming an animal keeper when I was a kid. I always felt that working with animals was what I was meant to do with my life. I have never wanted to do anything else.” — **Sara Hallager, Curator of Birds**