Animal Architects

Amazing Animal Builders

Los Angeles Zoo
Summer 2020
3rd-5th Grade
Zoo Camp is one of our favorite times of the year. We love getting to know our campers as we investigate animals, go on adventures, and - maybe most of all - have sing-alongs at the end of the day. We're privileged to act as mentors in exploring nature for the children in our care.

This summer is a little different, but kids still need animals, adventures, and mentors to inspire them. We're pleased to share ZooCamplettes: four fun activity packs that each explore a different Zoo theme. All of us can be nature mentors, and we hope you use them as inspiration for your own adventures this summer. Just don't forget to join us for a sing-along at the end of the day.

Thank you!

Supply List:

<table>
<thead>
<tr>
<th>Design Your Own Burrow</th>
<th>Build A Fort</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Paper</td>
<td>• Blankets</td>
</tr>
<tr>
<td>• Pencil, pen, or markers</td>
<td>• Pillows</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Build A Nest</th>
<th>DIY Terrarium</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sticks, leaves, grass, etc.</td>
<td>• 2L Bottle or shoebox</td>
</tr>
<tr>
<td>• Clay, salt dough (optional)</td>
<td>• Plant clippings</td>
</tr>
<tr>
<td></td>
<td>• Plastic Animal</td>
</tr>
<tr>
<td></td>
<td>• Assorted Craft Supplies</td>
</tr>
</tbody>
</table>
An **architect** is someone who plans, designs, and builds new spaces. The animal world is full of talented architects! These animal architects dig, weave, spin, and build unique structures to help them survive in the wild.

**Together we are going to explore**

**How? & Why?**

They do it?

**Before we get started, can you answer these questions?**

- **WHO** is an animal architect? Can you think of any?

- **WHAT** are some things animals build?

- **WHY** do you think they build?

Let's get started!
Burrows
A burrow is a hole or tunnel in the ground made by an animal.

Why are burrows important?
1. A safe place to live
2. Provides protection from predators & extreme weather
3. A safe place to raise young
4. A place to store food

Meerkats
Meerkats are native to the scorching deserts of Africa. Burrows help meerkats escape the heat and they provide a safe place to hide from predators. When the lookout meerkat, called the sentinel, sounds the alarm, they all run and take cover underground!

Tarantulas
You may be surprised by the variety of animals that burrow. Unlike other spiders, some tarantulas live in underground burrows.

Discussion: How do they do it?
Burrowing animals have special adaptations that help them dig. What do you think they are? Did you notice any in the videos?

Scientists in Australia have discovered a 110 million year old dinosaur burrow!
Burrows
There's more to them than meets the eye.

Meet the Experts

Prairie Dogs
Prairie dog burrows are called towns. From above ground, their towns may only look like a few mounds of dirt but if you dig a little deeper, you'll be amazed! Their burrows have bedrooms, nurseries, air vents, emergency exits, and even toilets! Prairie dog burrows also provide shelter for other burrowing animals like snakes, owls, and black-footed ferrets.

Design your own burrow!
Now it's your turn to be the architect. On a piece of paper, draw your own underground community. How many rooms will you have? How will you outsmart a predator? What special features will you add to make your town unique?

Parental Involvement: Low
Nests

A nest is a structure that an animal uses as a place to safely raise its young.

**Discussion:**

Here are 5 different types of bird nests. Examine the nests and surrounding area carefully. What do you notice about each nest? Why do you think the nests all look so different? What are the advantages and disadvantages of each nest?

Watch these videos to learn about how & why birds build such unique nests.

---

*Click here to see different types of nests*

**Build A Nest**

Gather sticks, leaves, flowers, clay, mud, or whatever else you'd like to use and start building. What kind of nest will you build?

---

*Click here to watch a hummingbird build a nest*

Parental Involvement: Medium
Nests

Birds aren't the only ones!

Many animals build nests including insects, alligators, lizards, turtles, snakes, raccoons, squirrels, rodents, and so many more!

**American Alligators**
Female alligators are excellent nest builders. They use mud, plants, sticks, and grass to build a nest that can be up to 10ft wide! She uses the nest to help incubate her eggs. Did you know the sex of the babies is determined by the temperature of the nest? Warm temperatures produce all female babies while cooler temperatures produce all males!

**Chimpanzees**
Great apes including chimpanzees, gorillas, orangutans, and bonobos build nests for sleeping. They build a new nest every day using the sturdiest and the most comfortable leaves and branches they can find. One chimp can build up to 19,000 nests in a lifetime!

Now it's your turn!
**Build a Fort**
Gather your blankets and pillows and find the perfect spot to build your own fort!

*Parental Involvement: Medium*
Hives, Webs, & Cocoons

Some of nature's smallest animals are the best architects!

Bee Hives
One of nature's most efficient builders is the honey bee. Bees work tirelessly on their hives because it's where they store food, raise their young, rest, and find protection. Honey bees have figured out that the hexagon shape provides the most space while using the least amount of wax!

Spider Webs
Webs are structures built by spiders to help them catch food. They can also be used for communication. Spiders have a special organ on their abdomen called a spinneret which produces their silk. Spider silk is stronger than steel!

Cocoons & Chrysalises
Caterpillars need to go through metamorphosis before they can become a moth or butterfly. Cocoons and chrysalises provide warmth and protection while they are transforming.

Click here to learn more about hives.  
Click here to see how a web is built.  
Click here to watch a caterpillar turn into a chrysalis.
Now that you've had the chance to see some amazing animal architects in action, can you answer these questions?

**How?**

- What adaptations* do animal architects have?
- What materials do they use?

**Why?**

- Identify a structure that provides shelter?
- Where do animals store their food?

---

**DIY Terrarium**

Now it's your turn to be the architect! Build your own animal habitat using a shoebox or soda bottle. What kind of habitat will you construct?

**Scavenger Hunt**

Keep your eyes peeled the next time you take a walk around your neighborhood. Can you find something that was the work of an animal architect?

*An adaptation is a behavior or body part that helps an animal survive.
Camp Rally

Click here for Camp Rally!

Thank you for joining us!
We hope to see you again soon!