



# APING APES

## ARE YOUNG CHIMPANZEES TOO COOL FOR SCHOOL?

by Emily Cambias

**A** light, misty rain has just stopped falling in the lush Budongo Forest of western Uganda in East Africa. A baby chimpanzee sits on her haunches, watching her mother with large dark eyes. Her mom gathers a handful of spongy moss from the forest floor.

She dips it into the water of a clay pit, letting the moss soak for a minute. Then she lifts the bundle to her mouth and sucks the mineral water out of the dripping moss sponge. Ahhh, refreshing! And it's good for her, too.

The little chimpanzee hops toward the clay pit herself. Her head cocks to the side as she looks at the moss in

her mom's hand. Curious, she grabs a ragged clump herself and clumsily dunks it in the water. The moss falls messily out of her hand when she lifts it out. She tries again, grabbing a more solid handful of moss. This time, the moss holds together when she dunks it in the puddle. When she sucks on a corner, she even gets a few drops of cool water.



Chimps fish for tasty termites using a thin stick. By age five, they are experts at it.

and then around age one ride on her back. Beyond just safety and food, it's a chance for babies to see *everything* in mom's daily routine: how she picks bugs off her arms, how the adults tell one another who's in charge—and how their mom makes a mean sponge.

## Teacher of the...Millennia?

If apes can learn so well, why aren't they rolling around wheelbarrows or making pots out of clay yet? The answer might be that humans have a special advantage: teaching.

Chimps and other apes can learn new skills—people even teach them to use computers and recognize symbols. But their parents don't seem to be *teaching* them hunting, foraging, or moss-sponging. Instead, they're just going about their business as usual, making no extra effort to ensure that their babies are learning skills the right way. Their babies learn as a side-effect.

Humans, on the other hand, are intent on teaching one another. We teach others new skills all the time. For example, usually older humans instruct kids how to read a book, play piano, ride a bike, or ice skate. We think about how to break tasks down into smaller points, and which parts are difficult. Importantly, we're good at keeping each other focused and noticing whether the

other person is understanding what we're teaching them.

It seems that human toddlers may learn the skills their parents teach them faster than ape babies, too. With that combination, it's no wonder that a 10-year-old human kid can do everything from write a poem to juggle to cook a mean macaroni and cheese.

In the Budongo Forest, the little chimpanzee finishes sucking water from her moss sponge. She'll continue to learn this skill and soon do it with ease. She climbs a nearby tree and hangs off a bouncy branch, chattering excitedly as her mother looks on. She'll pass on the secret of moss sponges to her own babies—and maybe a few more tricks she'll learn along the way.

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## Chimp See, Chimp Do

The baby chimp and her mother number among the members of the Sonso chimpanzee community. Scientists and conservationists began focusing on these apes in 1990, and have never stopped studying them. In 2011, they noticed something interesting: Instead of just drinking directly from puddles or scooping water with his hands or leaves, Nick, one of the troop's alpha males, started something new. He used moss sponges to get mineral water from the clay pit he liked to visit.

Within a week, seven more chimps in the community used moss sponges to drink

the mineral water. In 2014, researchers counted 48 apes in the troop using leaf or moss sponges to drink. Only a few older apes used the sponges, but the younger apes in the troop were more likely to do this. Their moss-sponge mastery was thanks to watching their mom, or another relative or friend, use them.

## Mom Knows Best

Chimp mothers do the work of raising their young—usually with the help of other females, who sometimes babysit. Babies cling to mom's chest,



Most chimpanzees learn to use tools like rocks from watching other chimps, not from being taught by those chimps.

Chimps notice what one another are doing. They need to be on the lookout, after all. Chimps have complex social structures, so they must know who's friendly and who's not. Chimps read others' expressions to figure out why they're acting a particular way. That makes it possible for them to pay attention to a new skill like using moss sponges. As they mimic the same behavior, they learn the skill themselves. Researchers call this *observational learning*. This same ability shows up in all apes around the world. Scientists also notice it in other animals that have intricate social networks, such as dolphins, crows, elephants, and rats.

While adult chimps can learn new skills, they don't seem to pick them up as easily as baby chimps. Since babies stay so close to their mothers, it's easier for them to see the same skill again and again, letting it soak in.



Moss used as sponges is one way chimps drink water. Other methods include softened sticks and folded leaves.

