

# Thumbs Are Handy

1/30/2004 - Kathleen Damonte

*Hold your hand out in front of you and look at it carefully. The human hand is made up of four fingers and one thumb. Have you ever thought about how much you use your thumb? This month's Home Connections activity will help you understand the importance of your thumb for doing simple, everyday activities.*



Examine your hand again. Move your thumb and fingers to find out how your thumb moves differently than your fingers. Fingers and toes are called **digits**. The thumb is the shortest, thickest digit on the human hand and moves in a different direction than the other digits. Human thumbs are called **opposable thumbs**. They are called opposable because the thumb can be moved around to touch the other fingers, which gives people the ability to grasp things.

Most **primates** (humans, apes, and Old World monkeys) and some other animals have opposable thumbs. Humans can move their thumb farther across their hand than any other primate.

Having opposable thumbs helps in grasping things more easily, picking up small objects, and eating with one hand.

## **More About Opposable Thumbs**

An opposable thumb is a physical ***adaptation***. An adaptation is a feature that helps a plant or animal survive in its habitat. Adaptations can either be physical (a part of the body) or a behavior an organism has developed.

Swimming in a school would be a behavioral adaptation for a fish that helps keep it from being eaten by other animals. An opposable thumb is a physical adaptation for primates.

Opposable thumbs help monkeys and apes climb trees and gather and eat their food.

Opposable thumbs help humans operate tools to make use of resources in our environment.

## **Other Animals with Opposable Thumbs**

As mentioned, other primates besides humans have opposable thumbs. Chimpanzees, gorillas, and orangutans have opposable thumbs. Many of these primates also have toes on their feet that can function like an opposable thumb. These “opposable toes” are particularly useful in climbing trees.

Opossums have toes on their hind feet that help them grip branches and climb. Giant pandas have a bony portion of their wrist bone that they use like an opposable thumb to grasp bamboo when they eat.

**Source:** <http://www.nsta.org/publications/news/story.aspx?id=49036>