Getting to Know and Love Your Brain

There are three big helpers in your brain. One helps you make smart choices. One helps protect you from danger. And one saves your favorite memories and your ABCs. Can you name the three helpers?

Prefrontal Cortex
(pree-FRUN-tuhl KOR-teks)
I’m prefrontal cortex—PFC, for short. I help you solve math problems and get to know your favorite book and TV characters. Give me time to work, and I can help you make friends, or make the best decision in a tough situation.

Amygdala
(uh-MIG-duh-luh)
I’m amygdala and I’m here to keep you safe! I react FAST. If there’s serious danger, I’ll help you run, freeze, or fight back.

Hippocampus
(hih-puh-KAM-puhs)
I’m hippocampus and I’m like a scrapbook in your brain! I save everything important that you want to remember—from your ABCs to the names of all the people in your family. When something happens to make you smile, I’ll save that as a happy memory!

Breathing to the rescue!
Breathe deep into your belly to stay calm and help your PFC think clearly.
Sweet dreams!

What's your bedtime? What time do you wake up? Count the hours between to find out how long you sleep.

If you counted 9, 10, or 11 hours, your brain is getting enough sleep to help it think and grow. If you counted fewer, you need to get more rest to help your brain do its job.

A neuron at work

Your brain has 100 billion—that's 100,000,000,000—brain cells, called neurons. Neurons pass along messages in a web, like the Internet! Those messages to help you think, feel, and remember.

Food for thought

Here's a fun way to get to know your brain: Compare it to foods you eat!

- How is my brain like a pineapple?
  It weighs about 3 pounds.

- How is my brain like bowl of spaghetti?
  The surface of your brain has many folds, turns, and tunnel shapes.

- How is my brain like a grape?
  It's mostly made of water—about 70 percent!

Amazing Facts About Your Brain

What kind of storm does your mind like best? A brainstorm, of course! See if you can feel your brain growing as you learn about how it works!

Is a bigger brain a smarter brain? Look at these brain weights to help you decide:

Dog brain: less than 1 pound
Human brain: about 3 pounds
Elephant brain: 13 pounds

Sure, elephant brains are big, but they can't solve math problems!

What really makes a brain smart is the parts it has and the way those parts work. Human brains have a large prefrontal cortex (PFC). Our PFC helps us think carefully, problem solve, and plan.

Do you have an adult-size brain?

Just about! Your brain is almost the same size now as it will be when you are 50 years old. But as you think and learn more, your neurons will grow bigger and thicker, filling in the space.

Help your brain cells grow!

What do you get when you cross a family’s vehicle with a family’s animal? Did you guess the answer to this riddle? Just puzzling over it can make your neurons stronger and thicker!

Growing neuron

Your brain adds new information pathways each time you solve problems or learn something new.

Answer: carpet