Phineas just isn’t acting like himself. He’s become angry and short-tempered ever since his accident at the railroad…

Dr. John Harlow

Right Hemisphere
Controls the left side of the body
Artistic Controls:
• Abstract thinking
• Understanding relationships of objects in space, like reading a map

Left Hemisphere
Controls the right side of the body
Analytical Controls:
• Mathematical ability
• Problem solving and decision making
• Language

Meet Phineas Gage.
The year is 1848 and he’s helping make way for the new railroad by shattering rock with gunpowder. He uses an iron rod more than 3.5 feet long to pack the gunpowder in.

Phineas’s brain was damaged in the frontal lobe, the part of the brain that we now know controls reasoning, planning, and decision making. The damage to this part of the brain explained his change in personality and his story helped expand the new field of neurology.

In this image, you can see the exact path of the iron rod through his skull and brain. Amazingly, Phineas survived his accident, but...
The Inside Scoop About the Brain’s Insides

The word *neurology* is first used by an English physician to describe issues related to the brain.

The cerebral cortex has to fold over itself many times to fit inside the skull, causing bumps and grooves on the surface of the brain. If the cerebral cortex were spread out, it would cover an entire page of newspaper!

"Neuron" is the scientific name for nerve cells. They often last our whole lives, making them the oldest cells in the body!

President George H.W. Bush declares this the "decade of the brain" to raise awareness about the importance and benefits of brain research.

Newborn babies have a "soft spot" on the top of their heads where the skull bones have not yet grown together.