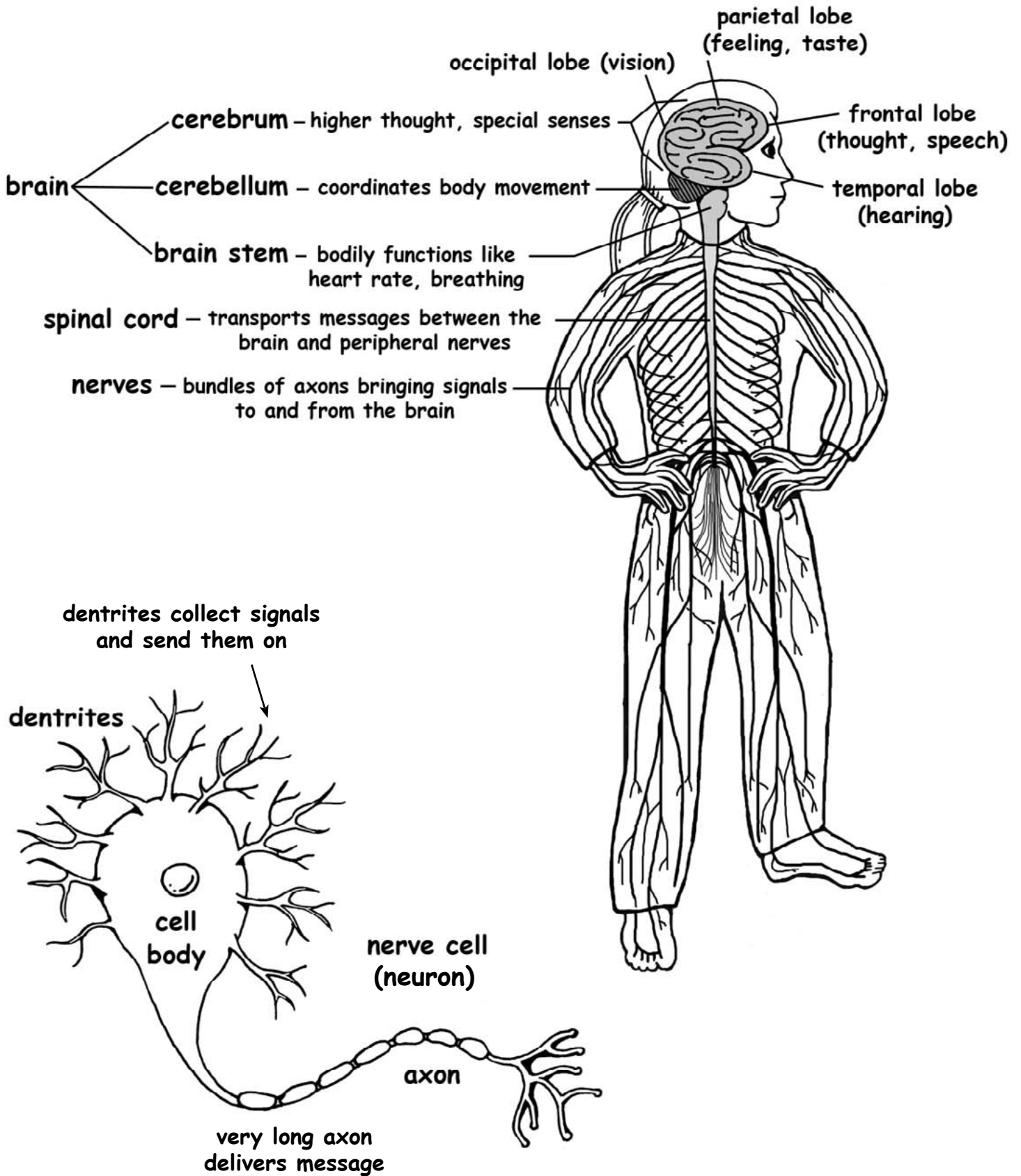


# The Nervous System



# The Nervous System

Of all the body's systems, the nervous system is the “brains” of the outfit. It controls how all the other systems work in a huge communication network. A bit like the internet, the nervous system has messages coming in and going out every second of the day and night. It keeps track of everything going on in the body to make it run smoothly. It keeps everything in balance or in **homeostasis**. To do this, the nervous system's messages have to be as fast as lightening. Like lightening, the messages throughout the nervous system are actually electrical signals.

## The Nervous System has three jobs:

1) It **receives information** (or stimulus) from the outside world and brings it into the body. Millions of tiny nerve cells sense the **stimuli**. They are called **sensory receptors**. The stimulus is called **sensory input**. If you walk outside and see the sun shining, smell the flowers blooming, and hear the birds singing, you have gotten three kinds of sensory input. Those are just the three stimuli that are the most obvious that you notice right away though. In truth, your brain is getting sensory input from all kinds of body sensors all the time.

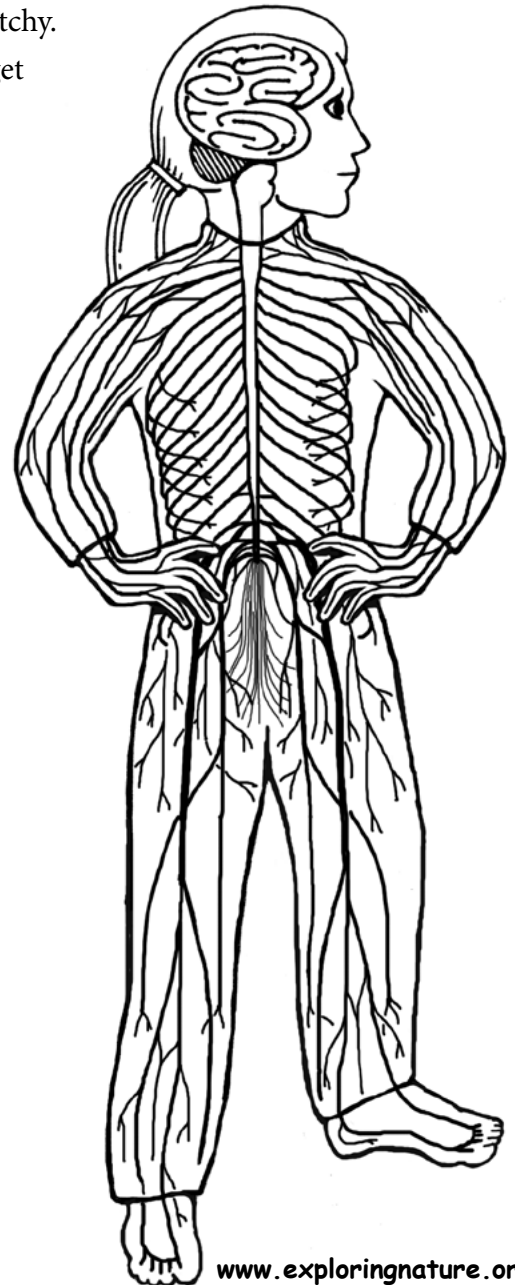
You will know when you get hot, cold, hungry, thirsty, sleepy, sore, or itchy.

You will be able to tell when you are lying down, standing up, falling, get stung by a wasp or scratched by a bush, because your brain gets the stimulus and tells you what it is.

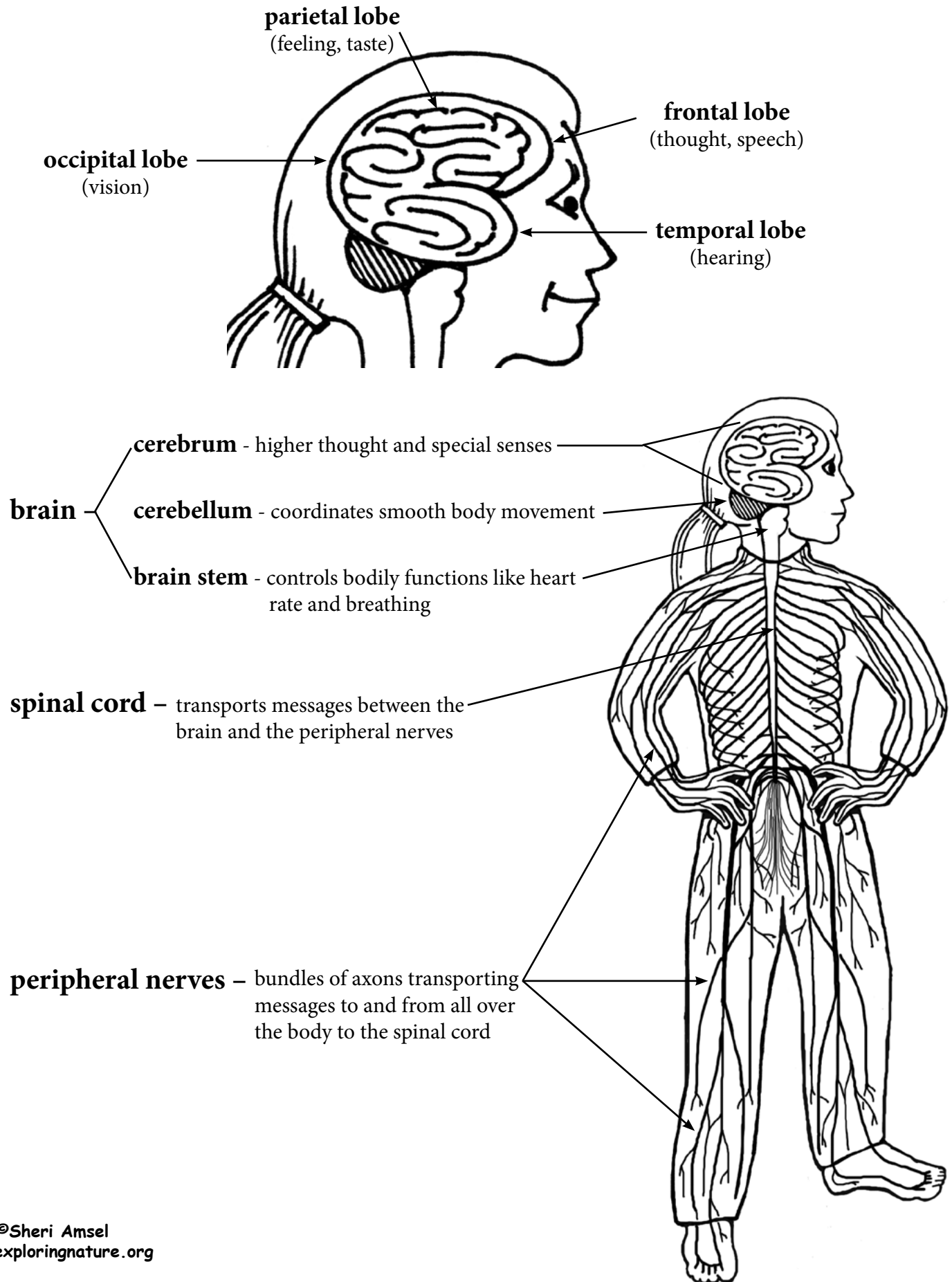
2) This brings us to the second chore that the nervous system does.

It **decides what to do with all that sensory input**. This is called **integration**, because it integrates or brings together the stimulus with what you are going to do about it. Your brain puts together sun shining, flowers blooming and birds singing and tells you – breath deep, smile and feel happy!

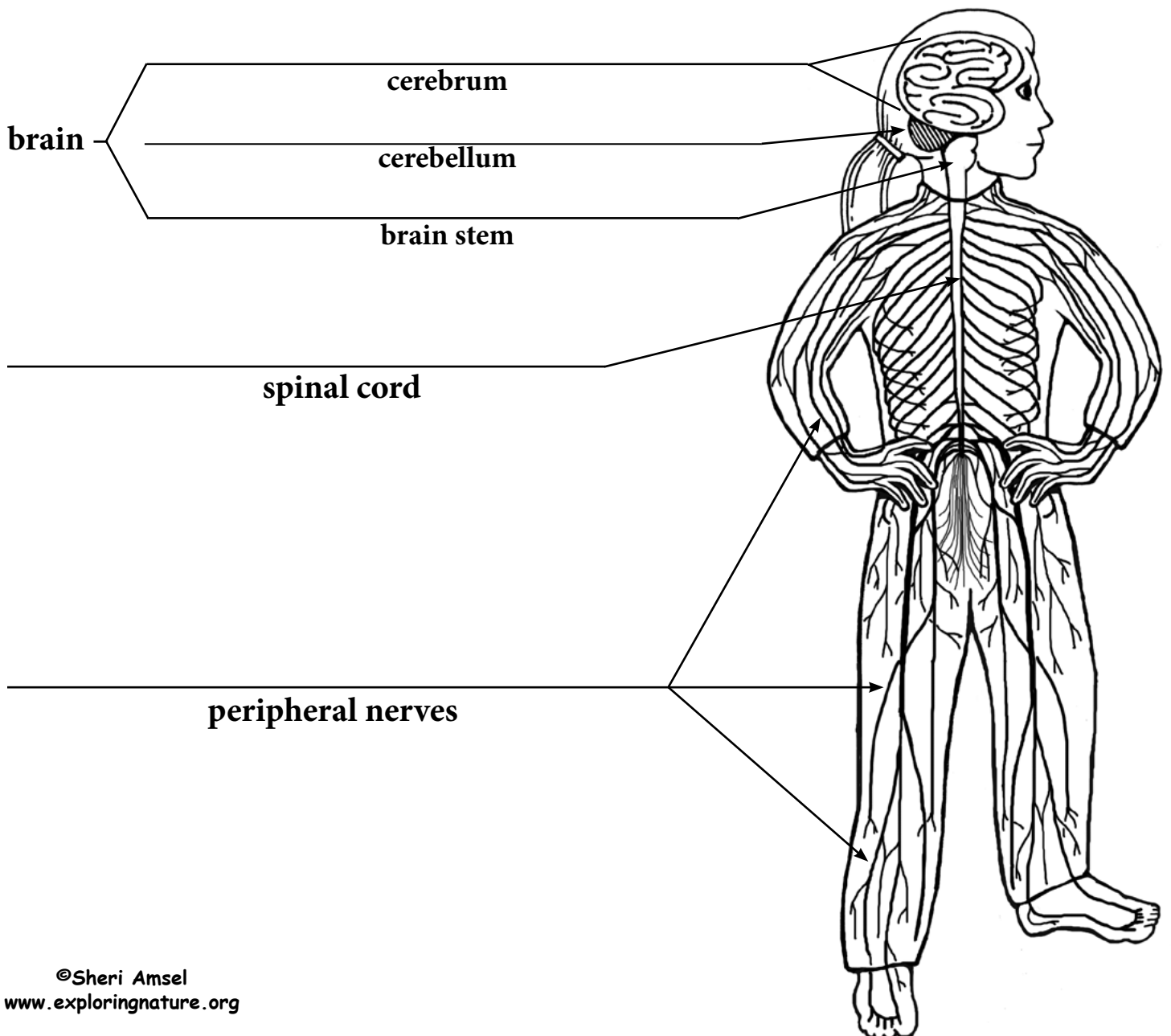
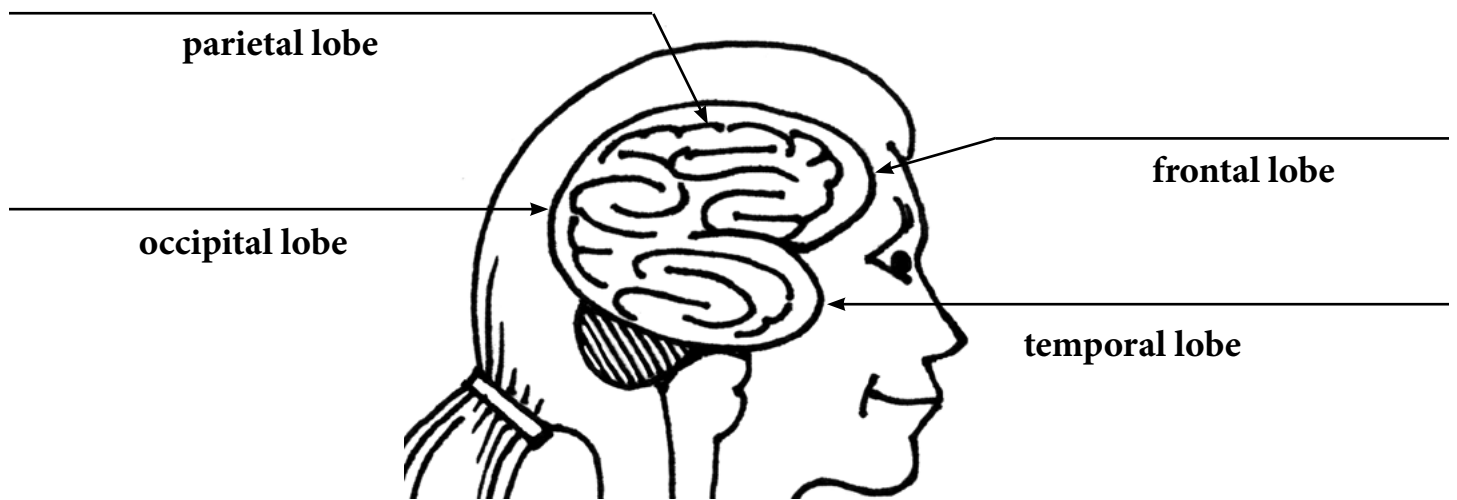
3) The third chore is **triggering action**. This is called **motor response** or **motor output**. Your muscles respond to orders. You skip down the road, breath deep and hum along with the birds. You can think of it like the motor of a car making the car move. Motor means action.



# The Nervous System



# Label the Functions of the Nervous System



# Label the Parts of the Nervous System

