The Nervous System

Nerves carry signals to our muscles to move parts of our body.
The Nervous System includes:

Brain - the command center of the nervous system

Spinal Cord - directly connected to the brain and made from bundles of nerves.
Nerves - thin, wire-like parts that carry information

5 Sense Organs

Eyes
Ears
Nose
Mouth
Skin
Functions of the Nervous System:

1. Maintain Balance
2. Maintain Coordination
3. Memory
4. Ability to Learn
5. Shares information about the inside and outside of our bodies.
6. Maintains Homeostasis
7. Directs the way you respond to stimuli.
<table>
<thead>
<tr>
<th>Stimulus</th>
<th>Response</th>
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<tbody>
<tr>
<td>A change in the environment that can make an organism react.</td>
<td>What your body does in reaction to a stimulus.</td>
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<tr>
<td>Temperature rises</td>
<td>You sweat</td>
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<tr>
<td>Temperature drops</td>
<td>You shiver</td>
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<tr>
<td>Someone scares you</td>
<td>You jump or flinch</td>
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<tr>
<td>Someone tells a funny joke</td>
<td>You laugh</td>
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Types of Neurons

Sensory Neurons

Interneurons

Motor Neurons
Fast Facts

- Pain can be a good thing because it alerts us when our body is in danger.
- Humans rely on their sense of sight the most.
- Your spinal cord is protected by the vertebrae.
- You can become paralyzed if your spinal cord is damaged.
- Drugs, alcohol, and lack of sleep can slow down the reaction of your nervous system.
Left Brain

LOGICAL
VERBAL
PART AND DETAIL
DIGITAL
SYMBOLIC
ORDER
MATH
RATIONAL
OBJECTIVE
LINEAR
TARGET AND DIRECTION
SYSTEM
ANALYTIC
Art
Random
and
Free
Big
Picture
Music
emotion
Imagination
Dream
Sur-real
Novel
Colors
Creative
Analog
Fun
Right Brain
Reaction vs. Reflex

- You think about what response you are controlled by doing. Your spinal cord, not your brain.
### Disorders of the Nervous System

<table>
<thead>
<tr>
<th>Muscular Dystrophy</th>
<th>ALS (Lou Gehrig's Disease)</th>
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<tbody>
<tr>
<td>Parkinson's Disease</td>
<td>Cerebral Palsy</td>
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