

## Common EEG Questions

### **What is EEG?**

An electroencephalogram (EEG) is a medical tool used to measure electrical activity of the brain. Our laboratory uses EEG to measure the electrical activity produced by the brain when performing different tasks and interacting with the environment.

### **Why use EEG?**

We use EEG because it is a quick, non-invasive, and painless way to record the brain's electrical activity. The data we collect with EEG will help us learn more about how children's brains develop and respond to environmental stimuli, such as touch. This will give us clues about how the brain functions.

### **How does EEG work?**

One way that information is shared in the brain is through electrical signals. Cells in the brain called neurons can send messages by creating electrical signals which change depending on what the brain is doing. These electrical signals are measured by EEG, and we use information about the patterns of electrical signals to provide us with evidence about how the brain functions. EEG data is collected through the use of an EEG cap which is covered in tiny electrodes that pick up electrical activity produced by the brain.



Electrodes

### **Does EEG hurt?**

One of the benefits of using EEG is that it is painless. The EEG cap that we use needs to be soaked in a salt water and shampoo solution in order to ensure a good connection between the skin and the electrode, allowing the brain's electrical signals to be picked up. The EEG cap fits tightly on your child's head and has the potential to drip which some children may find annoying.

The salt water – shampoo solution will make your child's hair wet but in contrast to often used gel-based EEG systems, it will dry without leaving any residue.