

Guidelines on how to use the Brain presentation with Kids aged 5-7 (k-1st grade) – Sebastien Thuault February 2011.

“Hello, we are going to talk about science today because Sophie and I are scientists. That is our job.”

Introduce the main rule:

“Please answer the questions and speak up if you have something to say but first raise your hand to ask permission.”

What is a scientist? Show picture of lab and scientists (slide 1)

Works in laboratories, wears special clothes: labcoat, goggles, masks, gloves etc...
Very serious, concentrated. Use unusual tools and machines.
Can the kids notice all these things?

“Let’s pretend we are scientists. Do you want to dress like a scientist?”

-> Give all kids PPE.

We are a special kind of scientists. We are neuroscientists.

What is a neuroscientist?

Ask them the question. A: A scientist who studies the brain! Do you know what the brain is? Do we have a brain? Where is it?

Show picture of the brain (slide2). Ask them to describe what they see (wrinkles, lines, different parts, ask them where the front and the back are).

Do animals have a brain? Do plants have a brain?

What is the brain useful for?

Ask them the question then show them slide 3. Our brain allows us to see what is around us, to hear music, to smell cookies and taste chocolate. Without our brain we could not run, jump or play games. We could not read, speak or sing or even learn songs. We could not feel happy or sad. We could not do much, we would probably be like plants!

There are different parts in our brain that are specialized to do different things.

Show slide4 of the brain.

Introduce the concept of functional regionalization. The parts for listening, seeing, moving, thinking...

How can our brain help us do all these things? Say that the brain is connected with itself and with the body.

Show the picture of the connection (slide5). Use the **brain<->body** sign and the analogy of the telephone cables. Show that there are “wires” that go to and come from our brain to and from all parts of the body. You can call them cables or wires but say that scientists call them nerves. Through these lines, the body talks to the

brain and the brain talks back to the body. This way, the brain knows what we feel and it commands what we do from our head to our toes. We would not be who we are without our brain.

Show the pictures on the right and ask: “What part of the body is connected with our brain so that we ...” showing individual pictures .e.g. move –connection to the legs, see connection to eyes etc...

Let’s play a game, a quiz game:

What brain belongs to what animal? Show slide 6. Let’s work in teams! The kids can go back to their tables, give them a print out and show pictures of the potential choices on the screen (slide7). We can help them find the right answers (mostly based on size). Since they are not all readers and for the sake of time also, they can just put the first letter of each animal on the brains or next to the numbers. Make sure they discuss their choices in small groups. Have one kid per group present their choices in succession. This can also be the time to compare results and discuss. Show them the answers slide 9. Give them some prizes.

The Brain is like a big LEGO model, it is buildt with small parts called neurons.

Let’s look at a neuron! Show slide 10. Remind them of the idea of connections. Explain that they are so tiny that you cannot see them with your eye, that you need a microscope.

Let’s make a neuron like on this drawing (show slide 11). Explain that there are 3 parts: the body, the antennas that receive information and the “stem” that sends the information in the circuit (axon, synapses and dendrites can be mentioned but these might be a bit confusing to them).

Let’s try to make one with pipecleaners! 3 or 4 pipecleaners per neuron are enough. While they make their model, show them a plastic brain model.

The end – approximtely 60 to 75 minutes depending on the level of excitement ☺!

Have fun!