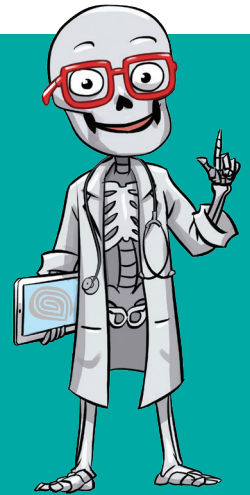


The Nervous System

Keep Calm and Neuron



You and the Time Skaters **travel back to the Second World War** in order to help their new friends, the Navajo Code talkers! Learn about the nervous system, and experience one of the most compelling stories in history

Hello Adventurer!

Welcome to Adventure 11 - The Nervous System.

In this workbook, you will learn about Guadalcanal, Solomon Islands and your body's Nervous System. There will be information to read, activities to complete, and quizzes to take when you are ready to challenge yourself! Take your time along the way - spend as much or as little time as you like on each activity.

Good luck, and have fun!



LEARN ABOUT The Nervous System

Taking everything you sense and sending that information where it needs to go!

VISIT Guadalcanal in 1942

Just like the Solomon Islanders, the Time Skaters find themselves in the middle of war.

MEET The Navajo Code Talkers

With a complex code made from an unwritten language, these soldiers braved battles to keep information flowing securely.



Yá'át'ééh*

That means "Welcome" in Navajo, the language of the Native American tribe, the Navajo, or the Diné.

***Say it like this: "ya-ah-TEH"**

The strongest syllable is shown in CAPITALS.

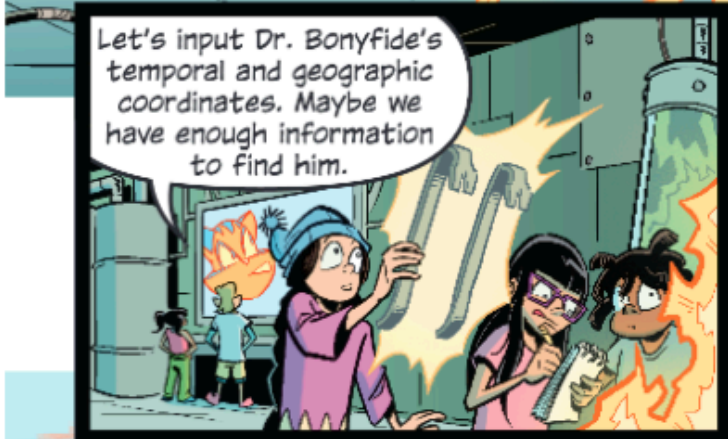
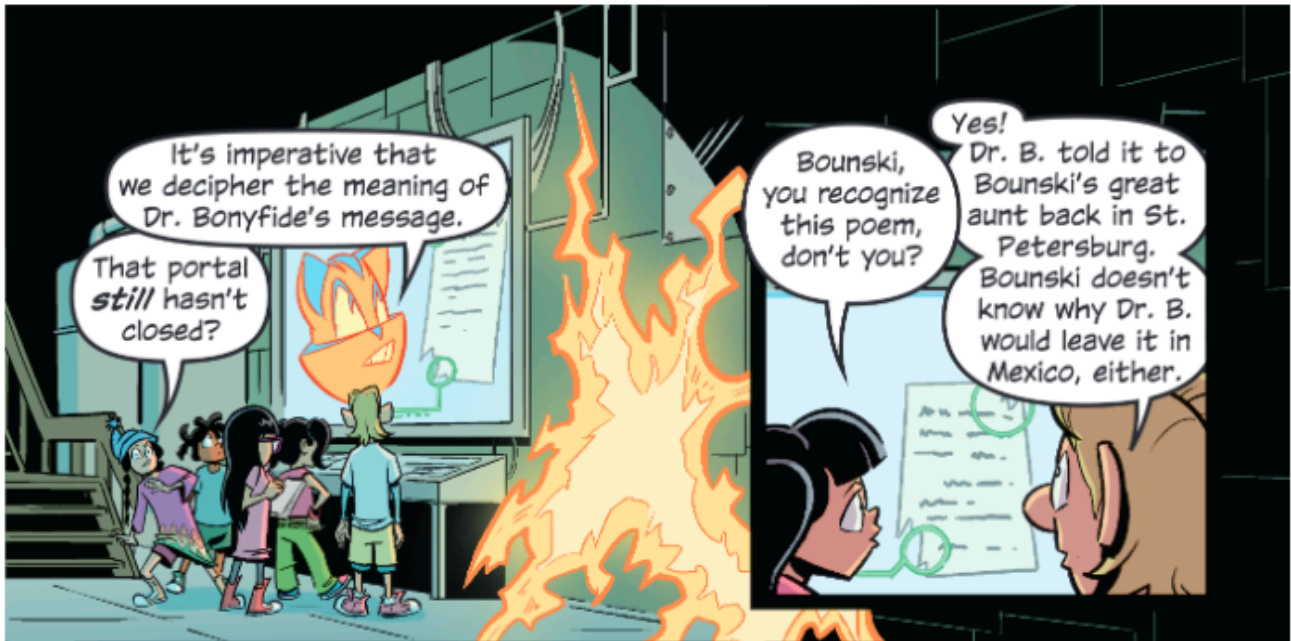


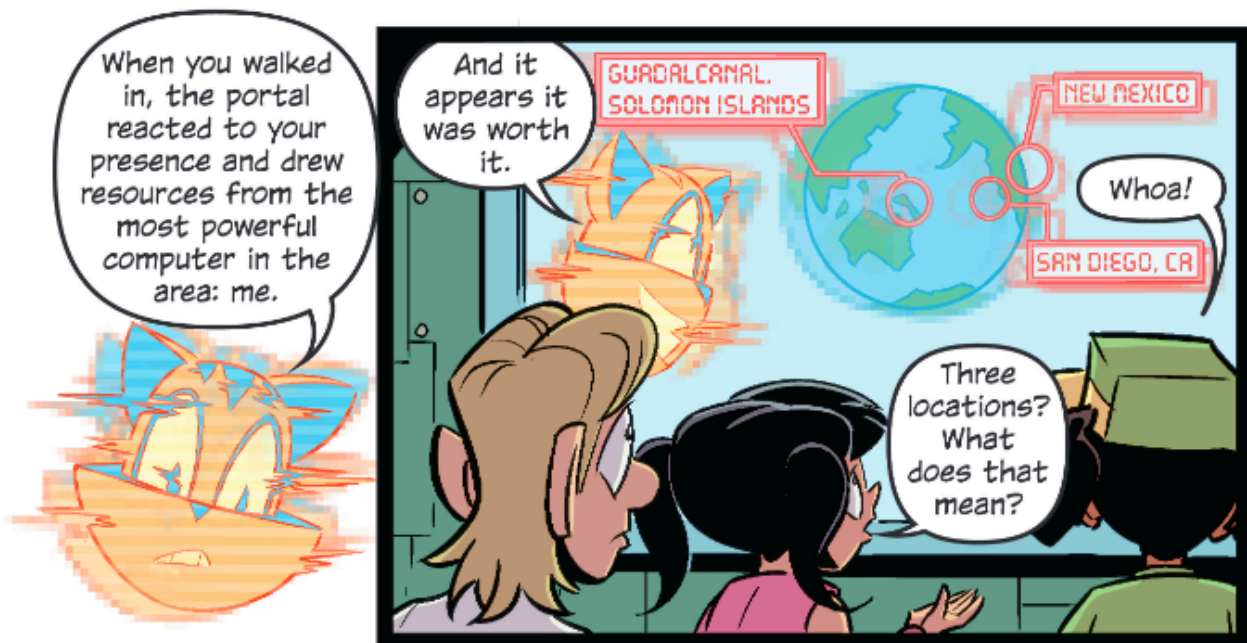
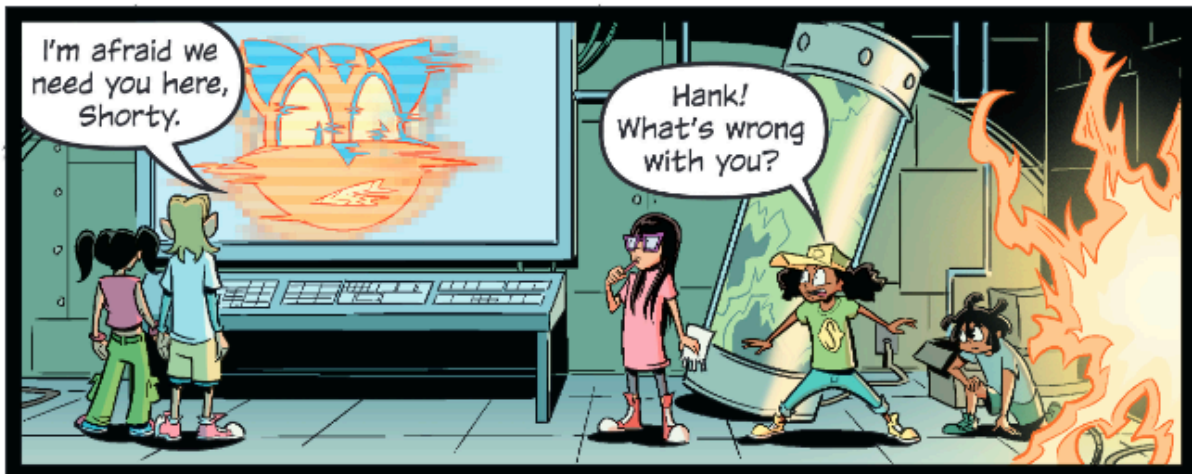
Enter this portal for....



Time Skaters Adventure 11

Keep Calm and Neuron!







Learning Calendar

Part **1**
**Know
Your
History**

Dive Into *Know Your History.*

Get to *Know Your Navajo Culture.*

Seek to *Know your Codes* the **Try** *I Put a Spell on You*

Learn about *Know Your Na'atl'lo* and **Play** Navajo String Games with *I've Got the World on a String*

Find out *Solomon Island Secrets*

Brave wild waters in *Can You Canoe*

Crack *the Code*



Part **2**
**Know
Your
Nervous
System**

Peruse *Know Your Science*

Galvanize your mind and solve your *Need for Neurons*

Master regions of the *A-MAZE-ing Brain*



Travel to 1942 and *Know Your Maps*, then **Go** *Dome, Sweet Dome*

Make your connections at *Synapse Station*

Do the *Brain Bop*

Part **3**
**Know
Your
Appetite**

Build up your hunger with *Know Your Appetite*

Prepare *Victory Garden Salad* and *Cottage Cheese and Green Onion Muffins*

Share your dishes with your family. *Discuss Thoughts for Young Chefs* around the table!



Part **4**
**Show
What You
Know!**

Prove your *Epic Brainpower*



*Great job
on all your
hard work!*



Know Your History

Solomon Islands, 1942

World War II Pacific Theater

WWII was a global war that involved over 30 countries but mainly the **Allies*** (the U.S., Great Britain, the Soviet Union, France, and China) and the **Axis*** (Germany, Japan, and Italy).

*Say it like this:

allies - "**AL-eyes**"

axis - "**AX-iss**"

The strongest syllable is always shown in **CAPITALS** and **red**.

Many people left their homes to go many other places around the world. In the comic, you find Americans far away from their homes in the Solomon Islands. Between September 1, 1939 and September 2, 1945, these two sides fought, both in Eastern Europe and in the Pacific, where Japanese forces attempted to control the Philippines, the Solomon Islands, and other territories, as strategic military bases. The Pacific Theater (theater = area of military operations) is where wartime messaging became particularly essential.



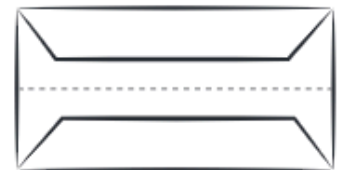
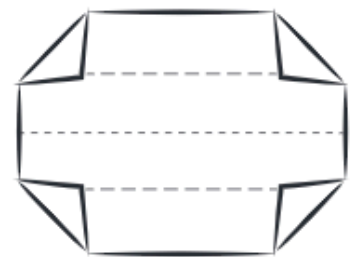
Can You Canoe?

Materials:

- Piece of paper
- Hot wax (or hot glue)
- Microwave Safe Container
- Paintbrush
- Microwave (You can also use a double boiler, but get help before using the stove)

Directions:

1. Fold the piece of paper in half lengthwise
2. Fold each half of the paper again so that the paper makes a long M shape
3. Unfold the paper and lay it flat. Fold each corner in to make a right triangle with the line from the closest fold.
4. With the corners folded in, fold the paper again inwards along the lines adjacent to the folded corners. This should put all the corners inside, and make a larger triangular shape where the folds are missing on each end.
5. Fold along the center line to collapse those triangles. It will look like it did back in step 2, but you can feel on either end where your folds left a triangle shape where the paper is only two parts thick.



6. Take the corner of the folded paper which is less thick and fold it like you did the corners before. After you do this, unfold that corner and fold it the other direction. Unfold it again. This should leave a slightly creased fold in your paper.
7. Unfold the paper one step lengthwise. You should still have your edges folded inside.
8. **Place your finger at the tip of the triangle on one end, and pull the edges together while pushing up from the bottom. This should give you a canoe shape on one end. Repeat on the other end.**
9. Carefully tuck each end under one side of the center paper. You have completed your canoe!
10. Carefully melt the wax in the microwave by heating it for 2 and a half minutes, stirring it, then heating it another 2 and a half minutes. If it is not liquid yet, continue heating in half minute intervals.
11. Once your wax is melted, carefully use your paintbrush to apply a thin coat of wax to the bottom of your canoe. Avoid touching the wax, if you need to take a break and let a part cool down that's okay. Make sure to cover every inch, a single leak is a big problem!
12. Let your canoe sit for an hour, or until the wax dries.
13. It's time to test it out! Place your canoe carefully in water and watch it float.

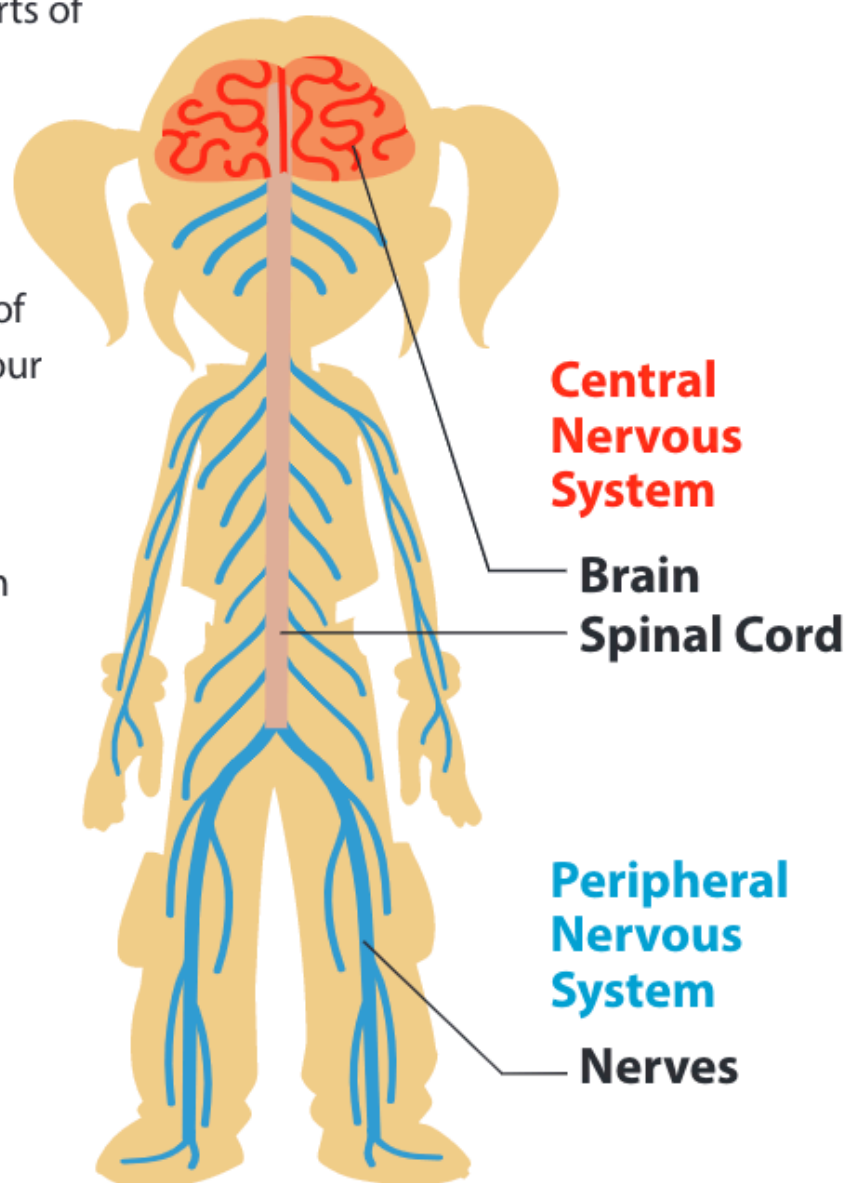
Safety Tip:

Remember to be careful when doing this activity, and ask for a parents help! Hot wax can be dangerous if used incorrectly!

Know Your Nervous System

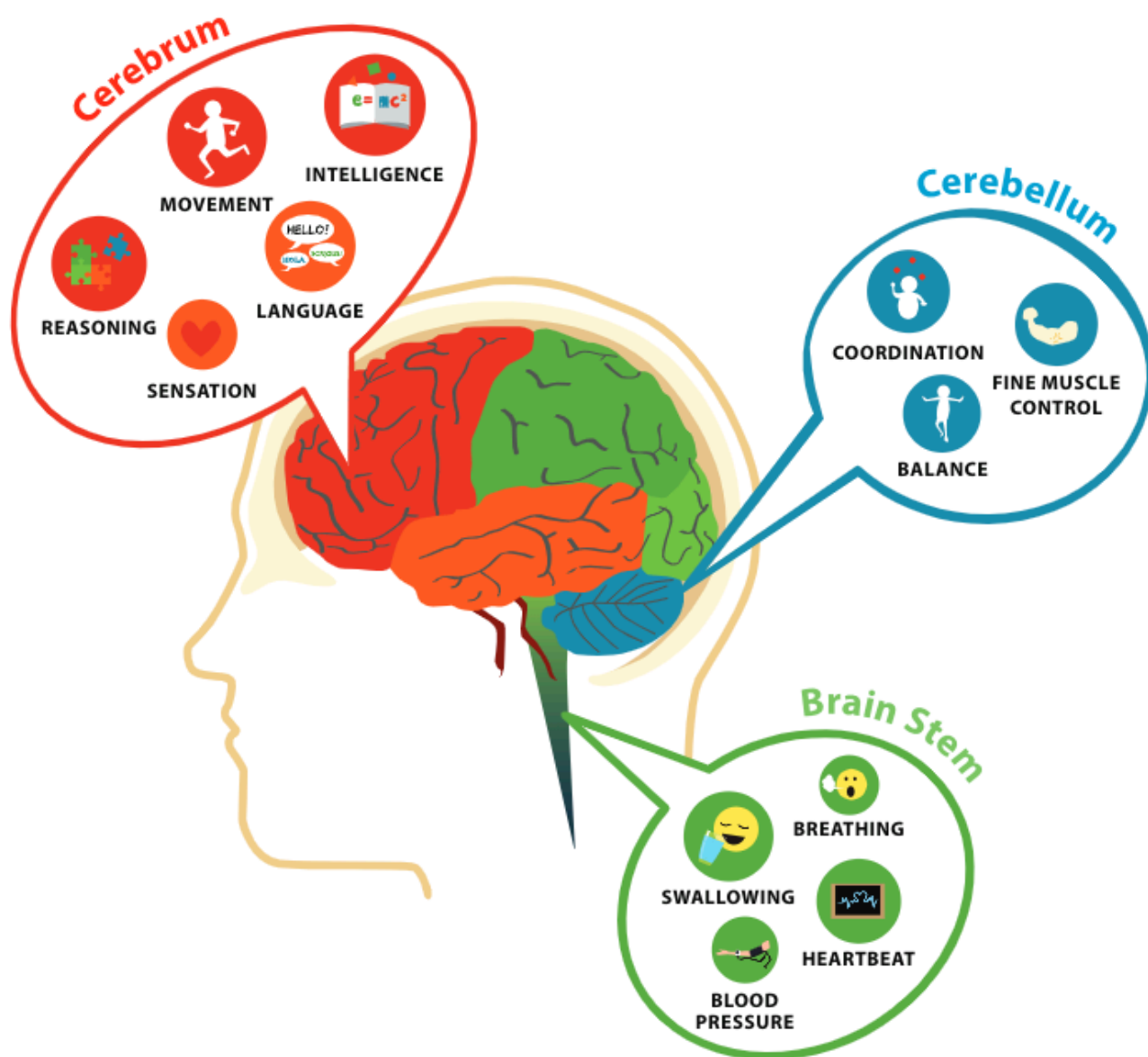
The coolest thing about the nervous system is that this system is you! It senses what is happening in your world and sends signals to activate other parts of your body in response to what it senses. Everything you think, feel, and do happens because of your nervous system.

Your nervous system is made up of the **central nervous system**—your brain and spinal cord — and the **peripheral nervous system**—all the nerves that branch off the spinal cord and run throughout your body, relaying messages to and from the brain.



Gray Matter Matters

If your body is an army, your brain is the commander—the ultimate that receives information, interprets it, and sends orders to the rest of your body based on that information. Your complex brain isn't just a single glob of tissue. It has three main parts: the cerebrum, the cerebellum, and the brain stem, and each one serves a different function.



A-MAZE-ing Brain

In this guide, you learned about central and peripheral nervous systems, which use your brain, spinal cord, and neurons to carry messages throughout your body. Now that you've gotten to know your nervous system, you might think your brain is pretty a-MAZE-ing!



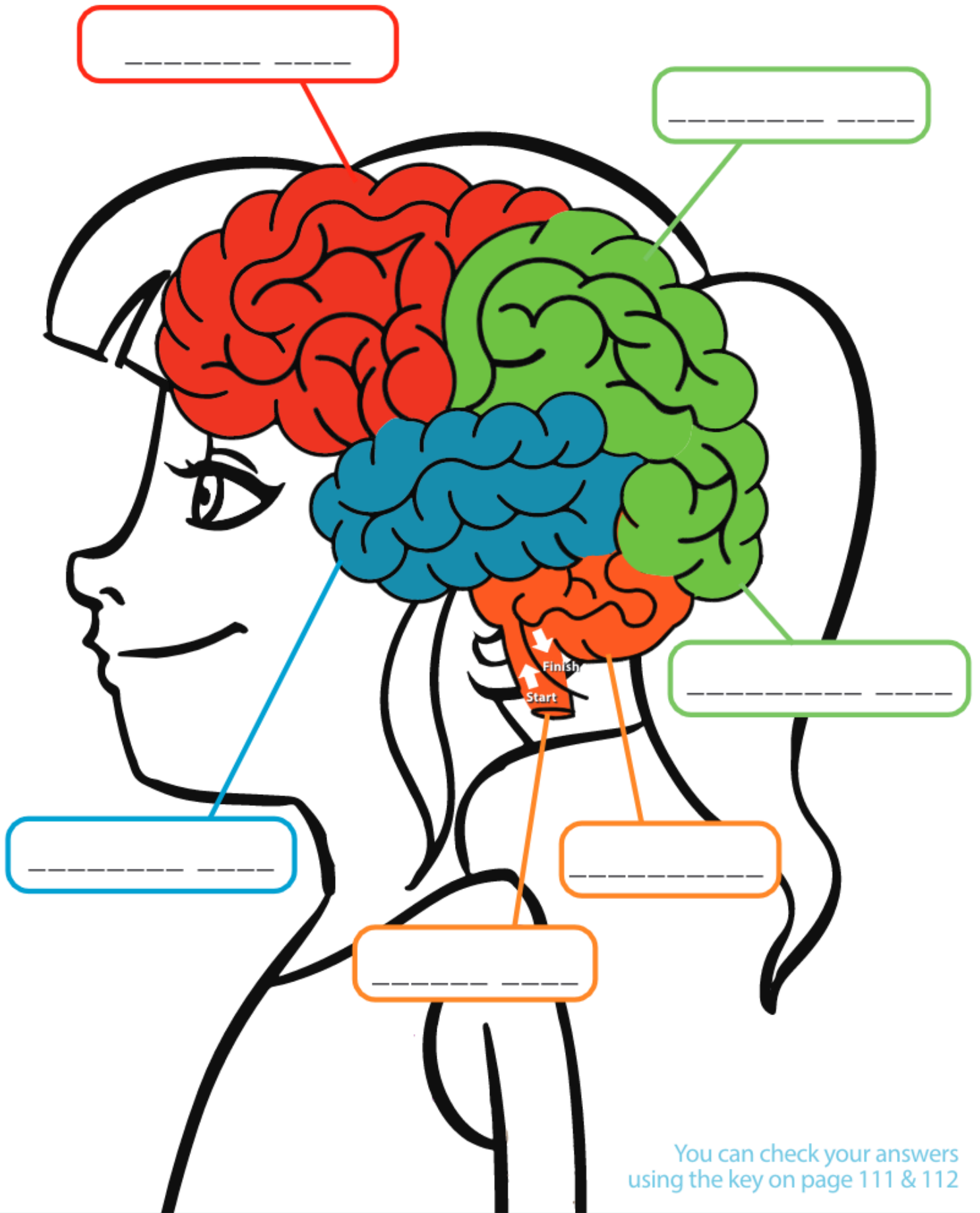
Travel through the central nervous system, neuron style, to complete the brain maze! Afterwards, can you help Pinky unscramble the names of the nervous system?

Materials:

- Pencil

Directions:

1. Starting at the up arrow, find your way through the brain maze!
2. Fill in the blanks to label each part of the brain.



You can check your answers using the key on page 111 & 112

Know Your Appetite

Food, Glorious Fuel

Your body needs nourishment to live. Your brain (working even while you sleep) is no exception, using about 20% of the calories you eat. It loves good food—fuel to keep your nervous system running!

Our relationship to food has changed over time. We used to hunt and farm instead of going to the store. Native Americans, for example, originally lived off the land: bison, berries, herbs. They grew vegetables and raised animals—and all of it organic!

In the 1880s, indigenous people were forced to leave their land, move to reservations, and replace their traditional food with items such as wheat flour, sugar, and dairy. The bison had been hunted to near extinction and harsh living conditions on the reservation made farming difficult. Chester Nez touches on this in his memoir, “Code Talker,” when he talks about how much he and the other Navajo Marines loved their meals in boot camp. To them, the food was plentiful and delicious!

In World War 2 (WWII), it was part of the war effort to maintain rations for soldiers abroad. People were encouraged to plant and harvest their own fruits and vegetables—something the indigenous tribes were already used to doing.



WWII Victory Garden Salad

In World War I (WWI), the American government encouraged people to plant their own food. "Victory Gardens" ensured there was enough to send the troops, as well as prevent a food shortage back home. Just as popular in WWII, these gardens were planted in backyards, in window boxes, on apartment rooftops, or in public parks. Many schools planted their own tomatoes, lettuce, and peas and used them in school lunches. Most people ate produce that was locally grown, saving trains and trucks to transport supplies and soldiers.

Twenty million families grew gardens in 1943. By 1944, Victory Gardens were producing 40 percent of the vegetables in United States! No matter where they were planted, Victory Gardens sent the same message: this food was being grown by the people, for the people.

Ingredients:




Prep time:
20 minutes
Serves 4-6

- 1 cup cherry tomatoes
- 1 bunch spring onions
- 1 cup green beans
- 2 cups cauliflower flowerets
- 1 small bunch of baby broccoli (optional)
- 1 cup corn (optional)
- 1 cup green peas (optional)

Feel free to add other vegetables like cabbage, beets, carrots or red onion!



Preparation:

1. If using cauliflower, broccoli, corn, peas, or green beans, steam the vegetables until they are just tender. 
Let them cool.
2. Mix all the vegetables in a large bowl and toss with the mustard dressing (see below). Ready to serve!



Mustard Salad Dressing

- 2 tbsp vinegar
 - 1/2 cup olive or vegetable oil
 - 1/8 tsp salt
 - Fresh ground pepper
 - 2 tbsp mustard
 - A jar (with a lid!)
1. Place all ingredients in a covered jar, shake vigorously to blend.



Show off your cooking skills!

Have your grown up take a photo, and share on social media using the hashtag:

#KnowYourAdventure



KnowYourselfOAK



KnowYourselfOAK

**CREATED WITH LOVE
BY THE
KNOW YOURSELF TEAM**

