



An Introduction to Cognitive Skills Testing & Training

Teachers, thanks for your service to our students and our future. LearningRx® Brain Training was founded by a family of educators and we hold you and your dedication to helping students in high esteem. Your job is becoming more challenging and increasingly demanding as the information age continues to evolve: students simply must be able to learn and read efficiently if they are to succeed in life in the 21st century. You are indispensable to the process, but you are also completely dependent on each student's core cognitive ability to learn in order to fulfill your mission.

Cognitive skills testing and training can become powerful tools in your efforts to help struggling students.

LearningRx wants to be your ally. Cognitive testing and training can often remove the barriers your students are experiencing. We have a variety of tools and materials to help you.

CE Course Opportunity

LearningRx has made the online CE self-study course, *Cognitive Skills—Understanding Learning Challenges*, available for free to K-12 teachers. Teachers can go to <http://learningrx.k12ceus.com> to register for a 5-, 10- or 15-hour version using coupon code LRX7713AED1F. Each teacher may register for one free self-study course.

What Teachers and Parents Want to Know About LearningRx Brain Training

“What is LearningRx One-on-One Brain Training?”

Our brain training programs let you work face to face with your own brain trainer, doing fun mental exercises that train the core skills the brain uses to learn, read, remember, and pay attention.

“Why Should We Hire a Brain Trainer?”

Physical fitness training provides a great analogy. Think about what it's like to commit to working out daily at the gym with a personal trainer who customizes your workouts, holds you accountable, and encourages you beyond your comfort zone. At LearningRx, that's what we do ... for the brain.

“Does it Work?”

We test the cognitive performance of every client before and after brain training. This is how we know that, on average, our clients have gained about 15 standard points in IQ, “moved up” an average of 30 “places” out of 100 in memory skills, and that struggling readers have gained more than three years in reading skills after about 72 hours of brain training. (These statistics are based on the average before- and after-test results of thousands of clients. Your students may see more or less improvement in IQ and/or cognitive skills following a program, should they eventually enroll).

I hope you find the accompanying Lesson Plans, Worksheets, and Coloring Pages inspirational and helpful in your classroom and at home.

To your continued success,



A handwritten signature in black ink that reads "Kim".

Kim Hanson
Former Elementary School Teacher and Mother of Four
CEO, LearningRx Brain Training





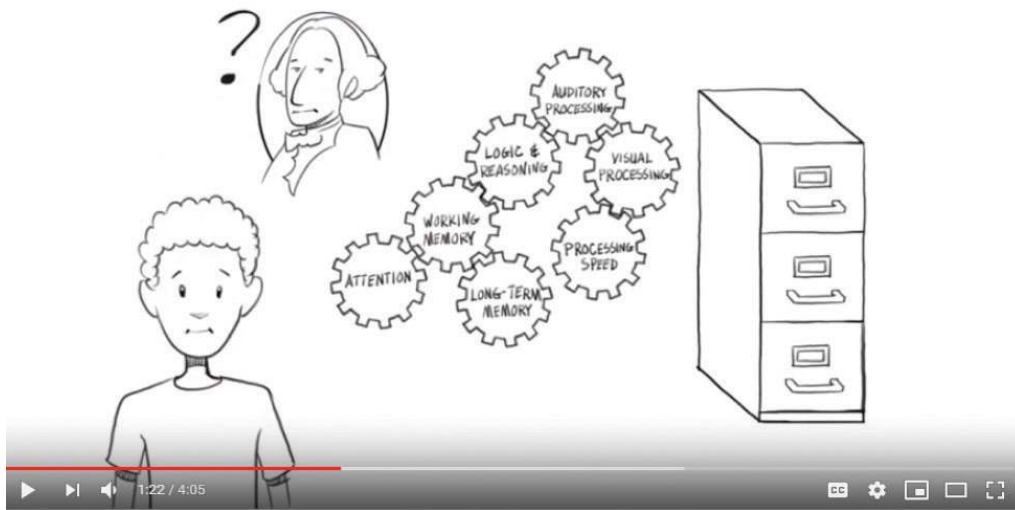
The Brain Skills Coloring Page

Items Needed

- Colored pencils, markers, or crayons
- Brain Skills Coloring Page

To introduce cognitive skills to your students:

1. Hand-out the black & white "Brain Skills" coloring page along with colored pencils, markers, or crayons for your students to color.
2. Show this fun, animated video to your students which explains what brain skills are and why they're so important at school, at home, and in life. Run time is approximately 4 minutes. Go to www.youtube.com/watch?v=6EvYU0kv06s or scan the QR code.



3. After the video, read this aloud to your students:

"Most people don't know this, but there are two parts to smart. There is what you know; like what you learn in school. This is academics; it's like a filing cabinet that holds everything you know. The other part to smart is how you process information: your cognitive skills.

Cognitive skills are the core skills your brain uses to think, read, learn, remember, reason, and pay attention. Working together, they take incoming information and move it into the bank of knowledge you use every day at school, at home, and in life.

Each of your cognitive skills plays an important part in processing new information. That means if even one of these skills is weak, no matter what kind of information is coming your way, grasping, retaining, or using that information is impacted. In fact, most learning struggles are caused by one or more weak cognitive skills."



Attention Arrows

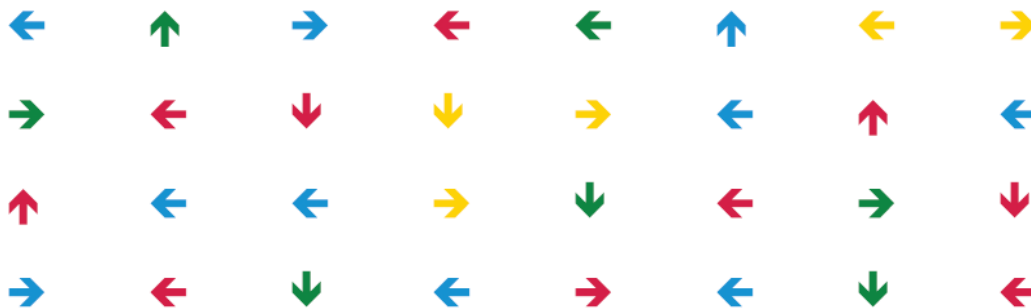
Items Needed

- Attention Arrows Worksheet #1

Benefits

"This exercise will work on your brain's attention skills and working memory skills and the Challenge and Einstein levels will work on your visualization skills. If you have good attention skills, you focus better and longer. This is a great skill to have when you are in school, because the classroom can be distracting and this will help you pay attention to multiple things at once. Just like listening to your teacher and taking notes at the same time. If you have good visualization skills, you might be able to read maps more easily and remember how to get to your new friend's house after the first time you go there."

Using the Attention Arrows Worksheet, try these six different levels with your class altogether or break into pairs.



Attention Arrows

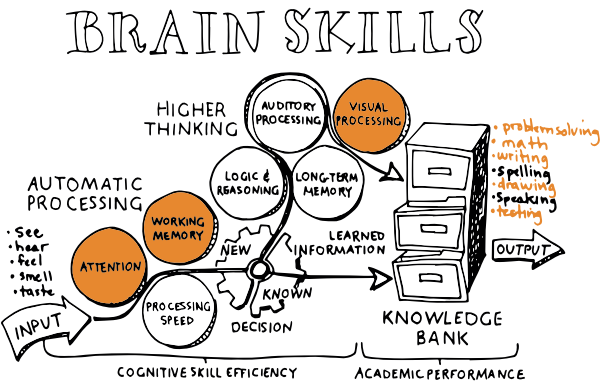
Try Brain Training for yourself using the COLORED ARROWS exercise above. See if you can conquer all six levels—from Super Simple to Einstein—using the instructions below!

Super Simple: From the top row, left to right, call out the color of each arrow. Practice until you can do it without mistakes.

Easy Smeasy: Call out the direction of each arrow (right, left, up or down).

Neuron Builder: Practice until you can do "Easy Smeasy" within 40 seconds! Then 20 seconds. (Yikes! Is your brain sweating yet?)

Challenge: Call out the direction of the arrows as if they were turned a quarter-turn clockwise.



Get your time down to 20 seconds without any mistakes.

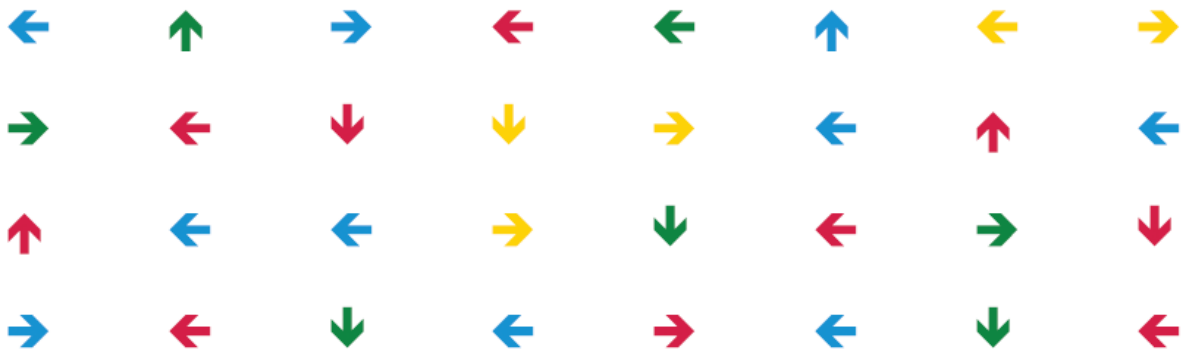
Brainy: Call out the COLOR of the UP and DOWN arrows, and call out the DIRECTION of the LEFT and RIGHT arrows. (You're exercising a brain skill called "divided attention"!)

Make it tougher by calling out "Red!" for yellow arrows, and "Blue!" for green arrows. (Your brain is really sweating now, isn't it? Good! Keep pushing until you can do it quickly and smoothly.)

Einstein: Call out the direction of each arrow, but in your mind turn red and green arrows a quarter-turn clockwise and turn yellow and blue arrows a quarter-turn counterclockwise.



Attention Arrows Worksheet



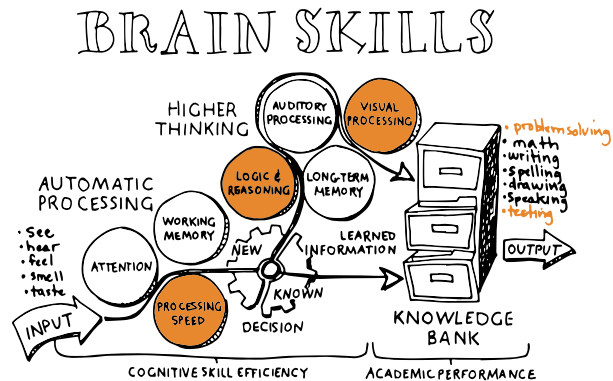


Skittle Sudoku

Items Needed

- Snack size bags of Skittles candies
- Skittle Sudoku Worksheet #2
- Skittle Sudoku Answer Key

Students should make sure they have the correct number of Skittles (at least four of each color—red, yellow, green, and orange) and be instructed NOT to eat their Skittles until after the game ends (unless they have purple Skittles, which they can eat right away).



Benefits

“Let’s play Skittle Sudoku! This procedure will build your visualization and logic & reasoning skills. If you have strong visualization skills, you will be able to use your mind to picture places and things. You might even remember where you left something or be able to find your place in a book you’re reading. If you have strong logic & reasoning skills, you can be the fastest person in your family at solving puzzles and riddles!

In front of you are four individual squares with colored circles. Each 4x4 square should contain four red, four green, four yellow, and four orange circles. Let’s start with the 4x4 square in the upper left corner. You can see that there’s a red circle in the first row, second row, and third row, but there’s no red in the bottom row. There’s also a red in the first, second, and third column, but not in the fourth column. So you would put your red Skittle in the fourth column, and it has to go in the bottom row, because that’s the only square with no red in the column or row. Let’s put a red Skittle there now.

Pick up a green Skittle and let’s look at the first column. The first column still needs an orange and green Skittle. Since there is an orange Skittle in the bottom row, you can’t put an orange there, so that means your green Skittle will go in the bottom left square and the orange Skittle will go in the upper left square. Fill in each square, making sure that each row and each column has only one of each color Skittle. Once you complete one 4x4 square, I’ll come around and check your work. Once it’s correct, you can move to the next one.”

(See answers on back)



Skittle Sudoku

Answer Key

Orange	Red	Green	Yellow	Green	Yellow	Red	Orange
Yellow	Green	Red	Orange	Orange	Red	Green	Yellow
Red	Yellow	Orange	Green	Yellow	Green	Orange	Red
Green	Orange	Yellow	Red	Red	Orange	Yellow	Green
Green	Red	Yellow	Orange	Green	Orange	Red	Yellow
Orange	Yellow	Green	Red	Red	Yellow	Orange	Green
Red	Green	Orange	Yellow	Orange	Green	Yellow	Red
Yellow	Orange	Red	Green	Yellow	Red	Green	Orange



Skittle Sudoku Worksheet

	Red		
Yellow		Red	
Red		Orange	
	Orange		

Green			
	Red		Yellow
	Green		Red
Red			

don't eat me!

	Red		
Orange			Red
Red			Yellow
	Orange		

	Orange		Yellow
			Green
			Red
	Red		Orange



Memory Training: Japanese Numbers

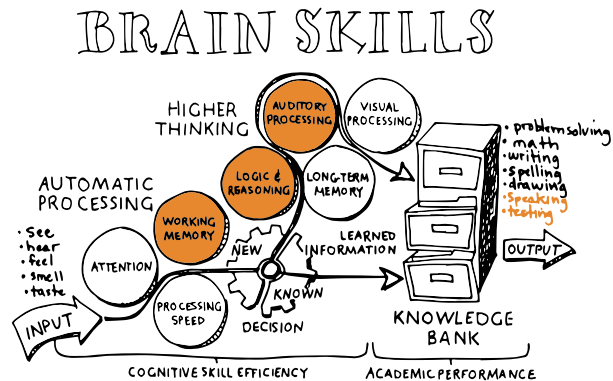
Items Needed

- Japanese Numbers Worksheet #3
- Pen or Pencil

Memory Procedure

To begin, teach your students the Japanese numbers 1-10 along with pronunciation. Based on the size of your class you may want them to break off into partners or groups once you've taught them the sounds.

"Today, we are going to use our auditory memory and come up with hand movements or a dance to help us remember how to count to 10 in Japanese! First, I'm going to teach you how to count to 10 in Japanese."



- 1 One in Japanese is "ichi." The "i" sounds like "ea" in "each" and the "chee" is like "cheek." Let's all say this together: ee-chee.
- 2 Two in Japanese is "ni", which is pronounced just like "knee." Let's say this together: knee.
- 3 Three in Japanese is "san", which is pronounced "sahn." Let's say it together: sahn.
- 4 Four in Japanese is "shi", which is pronounced like "she." Let's say it together: she.
- 5 Five is "go." When you say "gohw" in Japanese, you need to leave your mouth rounded when you're done to prevent slipping towards a "w" sound. Let's practice this sound together: gohw.
- 6 Six is "roku." The R is pronounced like a cross between R and L, so when you say it, it will sound similar to "loh-koo." Let's practice this sound together: loh-koo.
- 7 Seven is "shichi", which is almost like a cross between number four and number one. It sounds like "she-chee." Let's practice this together: she-chee.
- 8 Number eight is "hachi", and it sounds like "ha!" then "tchee."
- 9 Nine is "kyuu", and sounds a lot like the letter "q" except that you need to make sure to keep your mouth rounded on the "oo" sounds. Let's practice this together: kyoo.
- 10 And last, the number 10 is "juu", and it's pronounced "joo" with a little bit of a "zh" sound. Let's practice all 10 numbers together:
"ee-chee, knee, sahn, she, ghow, loh-koo, she-chee, ha-tchee, kyoo, zhoo."

(cont'd on back)



“Now that we’ve learned all 10 sounds, let’s break off into (partners or groups) to come up with a fun way to remember these numbers. Rather than creating a visual picture for these numbers, we are going to work with their SOUNDS. What does ichi sound like to you guys?”

Teachers, your students should be led to the answer, “itchy.” “How can you demonstrate the word “itchy” with the number one?” Help them come up with some ideas to physically demonstrate the sounds of the word. Suggested: Have them itch their pointer finger help up like a one.

“That’s great—that can be the first part of your hand gestures! The second number is ni, which sounds exactly like ...” Students should answer “knee.” “So to demonstrate the first two numbers, you could start by itching your pointer finger, and then move to scratch your KNEE with two fingers. Those are the first two numbers in Japanese! Let’s break off into (partners or groups) and together, you can work on the rest of the numbers and come up with motions for 3–10, based on the SOUNDS of the words, and be sure to incorporate the number with the motion and the word.”

“You can write down your ideas on the back of your Japanese Numbers 1-10 Worksheet. I’ll give you about 10 minutes to create your own hand gestures and movements, and then we will come back and share our ideas.”

Teacher, you can select the favorites that the students created for each number then practice them with your students all together.

During their partner/group time, you may want to go around and make sure they are on the right track with their ideas. Once you choose the best motions, you can practice them all together and check for memorization.



Japanese Numbers Worksheet

一 二 三 四 五

1

Ichi
(ee-chee)

2

Ni
(knee)

3

San
(sahn)

4

Shi
(she)

5

Go
(gohw)

六 七 八 九 十

6

Roku
(loh-koo)

7

Shichi
(she-chee)

8

Hachi
(ha-tchee)

9

Kyuu
(kyooh)

10

Juu
(zhoo or joo)





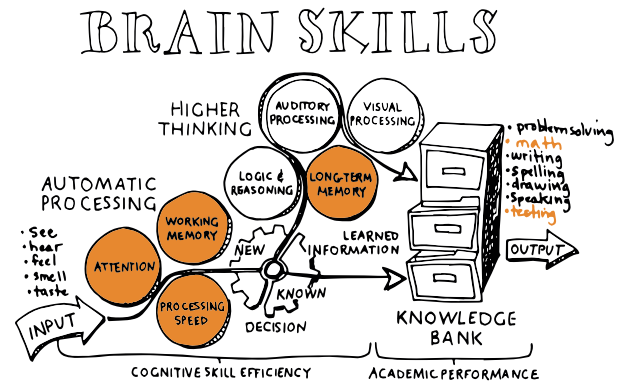
Number Columns

Items Needed

- A metronome (you can download a metronome app on your smart phone)
- Use the Number Columns Worksheet or write numbers on a white board)

Benefits

“For our last brain training activity, we are going to work on some math facts. This procedure will build your attention, memory, processing speed, and math skills. If you ever have a job where you need to do mental math—whether you work in a restaurant or grocery store or an accounting firm, being able to quickly do mental math is a very good skill to have!”



Number Columns Procedure

The student adds a constant number to each number in a column (recommend: starting with adding six and moving up) saying only the answer. This can be done in a group setting, but if your group is large, you may want to split into smaller groups.

You can also practice your Japanese numbers using these number columns, first without the beat and then with the beat.

“On the Number Columns Worksheet I passed out, you should see four number columns with numbers zero through nine in random order. We are going to add (six) to every number in column (A) on the metronome beat. It sounds like this: 10 (beat), 6 (beat), 8 (beat), 9 (beat), 12 (beat), and so on. Are you guys ready to try it?”

Work through a few columns together. Then move on to seven, eight, and nine. You can also subtract if your group is doing well.

“Now, let’s practice our Japanese numbers using column (C)!”

Take the students through the column you choose, starting off beat so they can get used to saying them out of order. Then, move them to the beat.

“Can you feel your brains working to remember the new numbers you’ve just learned? Did you notice how the metronome beat adds difficulty to the procedure?”

Then take the metronome beat away, and ask them if that made it easier.



Number Columns Worksheet

A	B	C	D
4	1	1	2
0	5	5	3
2	8	3	6
8	9	7	2
3	4	2	4
6	1	4	0
4	3	6	2
1	6	4	3
5	9	0	1
8	7	1	5





Lesson Plan Wrap-Up

Items Needed

- “I ♥ Brain Training” Coloring Page
- Colored markers, pencils, or crayons

Inspire a group discussion with our students by asking the following questions:

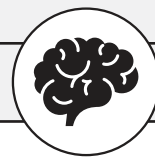
1. What was your favorite brain training exercise? List their answers here:

2. Did you find any of the exercises hard?

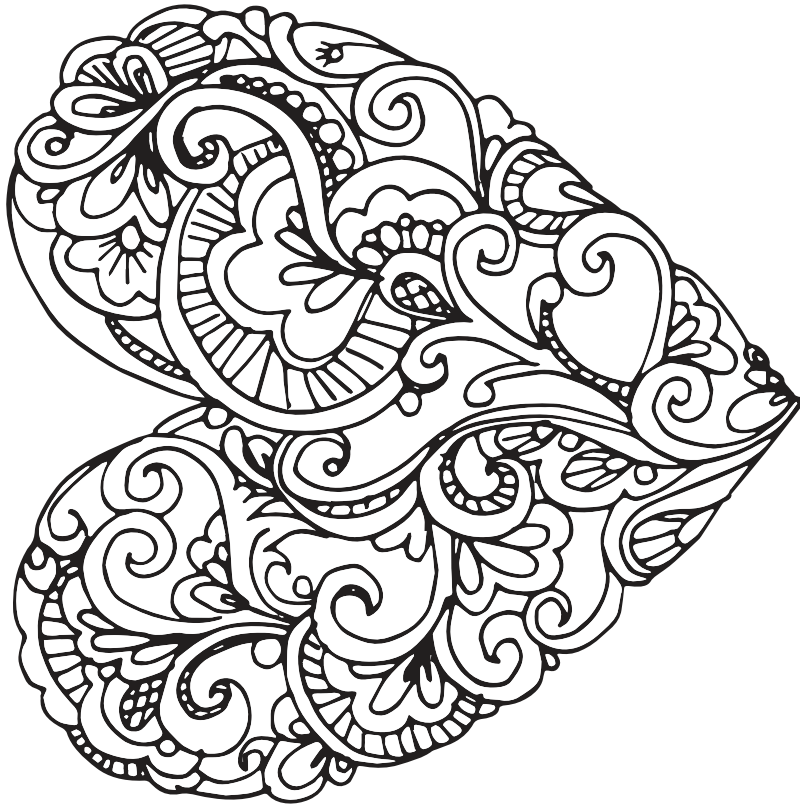
3. What part of the exercise(s) was hard?

4. If you trained your brain every day, what would you expect to change?

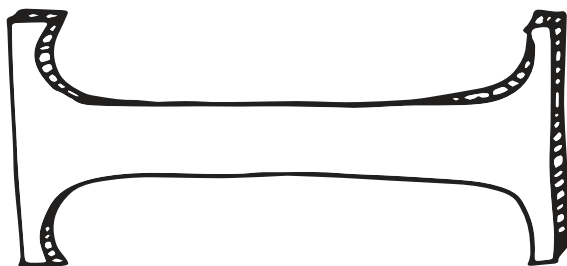
Next, have students color the “I ♥ Brain Training” coloring page. Ask them to draw something on the back that they would like to do better, faster, or easier.



Draw something that you would like to do better, faster, or easier.

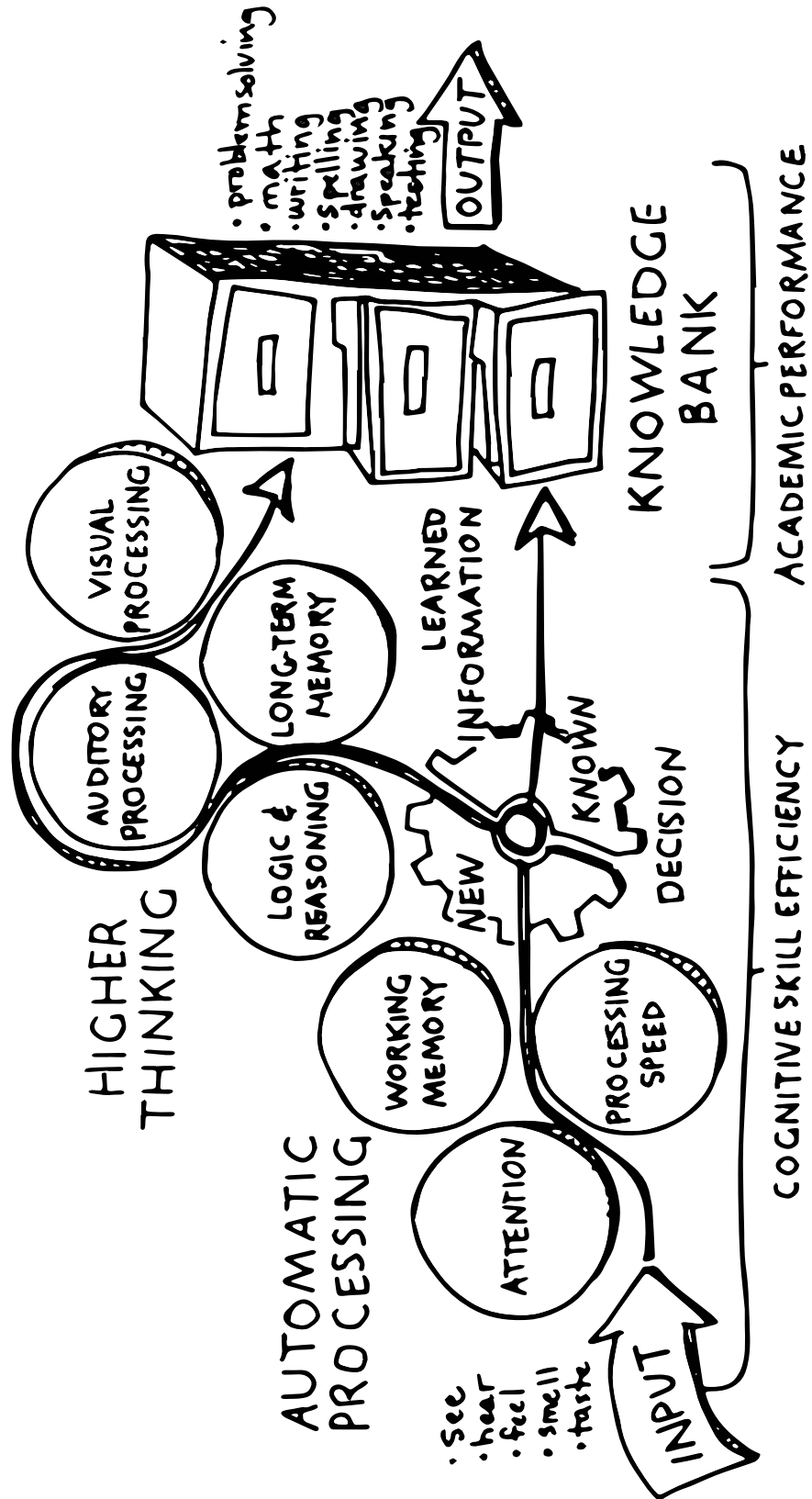


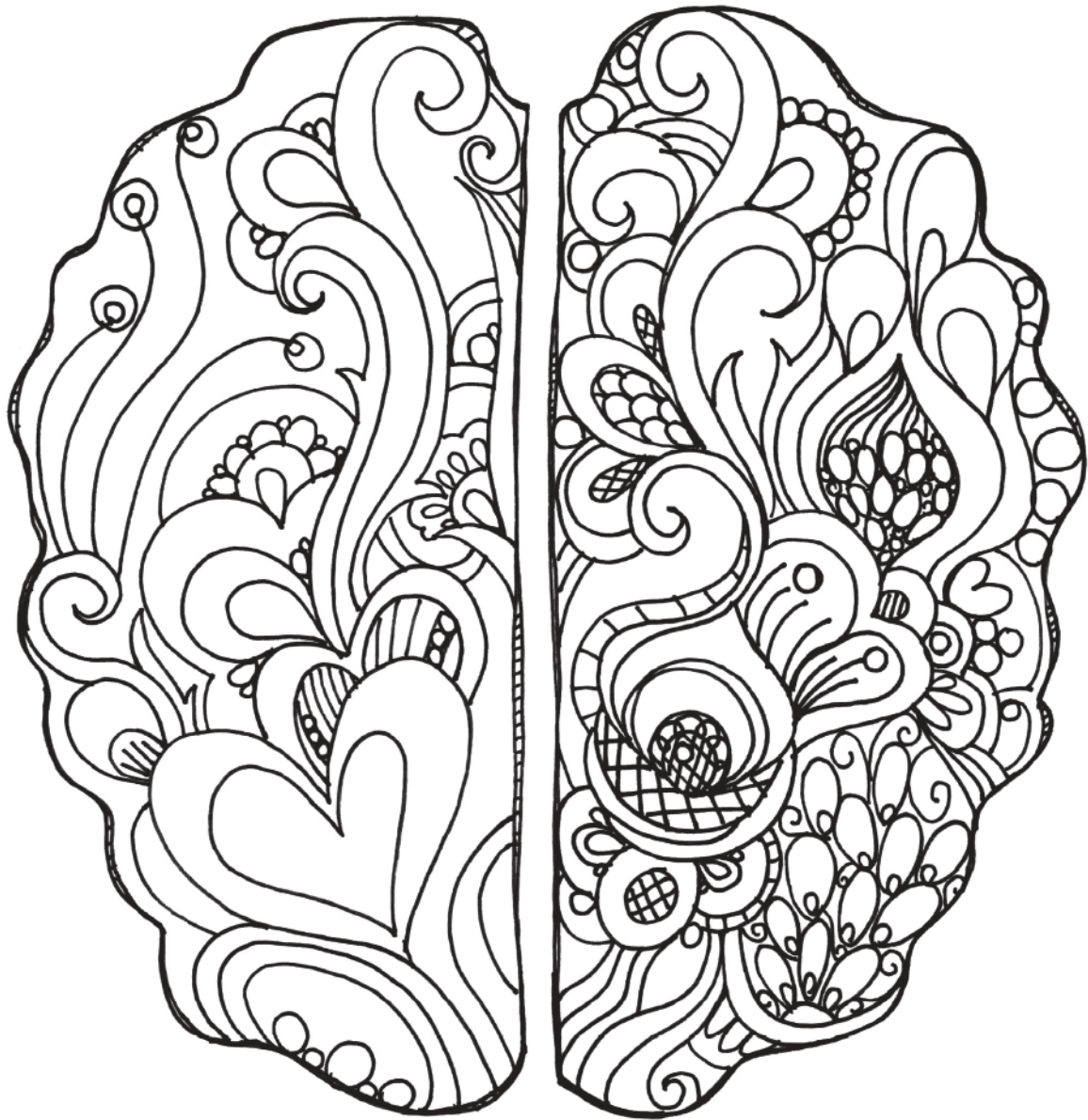
TRAINING





BRAIN SKILLS





TRAIN YOUR
BRAIN



TRAIN YOUR BRAIN



BOTTLE CAPS

