

# cognitive skills



six fun brainy games for  
parents and kids to do together



BrainRx®





## How does brain training help your brain?

Did you know that what you do for your brain today can impact what your brain can do for you tomorrow?

I'm Dr. Ken Gibson, founder of LearningRx, which is the parent company of BrainRx, and I've been helping people get faster, smarter brains for 40 years.

This game pack contains six fun brainy games. You'll need a partner for some of the games, so grab a parent or grown-up (or even a friend or sibling).

These games are good for you because intense mental exercise stimulates your brain to improve the way information is processed and remembered. And when your brain handles information better, it makes school, work and life easier.

In BrainRx centers throughout the world, we work with students of all ages (and even adults), taking them through intense, customized workouts for the brain. Our programs help people think, learn, read, reason, remember and pay attention better than before.

I hope you enjoy this game pack. No matter what your age, it's never too soon (or too late!) to take better care of your brain!

Let the games begin!

Dr. Ken Gibson  
Founder & CEO  
LearningRx

To learn more or find a center near you, visit:

[www.brainrx.com](http://www.brainrx.com)

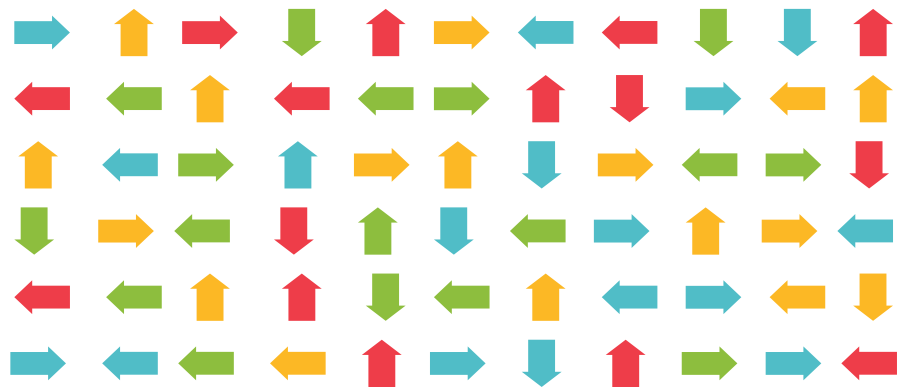
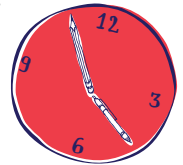
# COLORED ARROWS



## Getting Smarter Starts Here.

**This exercise will improve your brain's attention skills and working memory skills, too!** You won't be able to do all the levels quickly right away (if you could, your brain wouldn't get any exercise!).

The way to make your brain "grow" is to find the level where it gets hard, then keep going! It's like pumping iron. Make your brain sweat a little.



**SUPER SIMPLE:** From the top row, left to right, call out the color of each arrow. Practice until you can do every row 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 even 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.

Whew! Now go back and do some of the earlier levels. Piece of cake, yes? That's because all that "mental sweat" strengthened your neural connections (and even created new ones) to handle the challenges!

# BATTER UP



This brain teaser is calling your name.

**Cognitive brain TRAINING is soooo unlike schoolwork and classroom teaching.** This exercise develops divided, selective, and sustained attention, working memory, math computation, and processing speed.

**PREPARATION:** Grab a partner and toss around a few numbers to warm up your brains.

**DIRECTIONS:** One person (the Pitcher) slowly calls out the numbers printed in green in the lineup below. The other person (the Batter) gets to mentally add the last two numbers the Pitcher says and say the answer out loud. For example, as soon as the Pitcher reads the first two numbers ("1, 4"), the Batter says "5." (The correct answers are in blue below the line of green numbers).

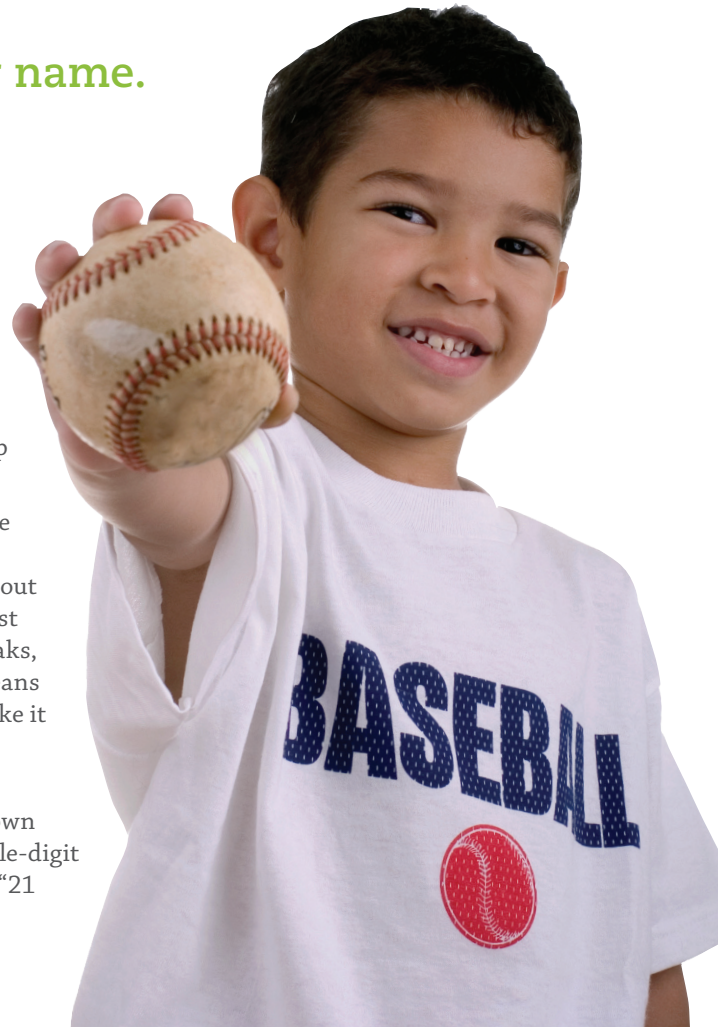
But here's where it gets tricky. When the Pitcher reads the next number in the list ("2") the Batter may be tempted to call out "7" (by adding 2 and 5). The RIGHT answer, however is "6." Remember, as Batter, you want to mentally add up the last two numbers that come out of the

Pitcher's mouth—not the last two numbers you hear. After you go through all the numbers in the exercise, swap roles and try again.

**BRAINY:** To add difficulty (like it wasn't already challenging enough!) have the Batter call out the difference between the last two numbers the Pitcher speaks, rather than the sum. That means subtract, don't add. Next, make it even harder by multiplying.

**EINSTEIN:** Ready for the big leagues? Now make up your own series of numbers using double-digit numbers (here's an example: "21 14 50 19 73...").

Ready? Play ball!



## BATTER UP! GIVE IT A TRY...

### EXERCISE

(with Addition Answers)

1	4	2	3	3	5	2	3	4	1	2	3	4	5	2	5	2	1	5	2	4	2	6	6	4	9	3	1
	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
	5	6	5	6	8	7	5	7	5	3	5	7	9	7	7	7	3	6	7	6	6	8	12	10	13	12	4

"Pitcher" calls out...  
(numbers in green)

"Batter" says...  
(correct Addition  
Answers in blue)

Subtraction Answers:  
3 -2 2 -4 0 2 -5 6 2  
-1 -1 -1 -1 3 -3 3 1 -4  
8 12 20 10 10 2 5 10 8  
3 12 36 36 24 36 27 3



# WORD PLAY



Did you know your brain can “shift gears,” engaging a set of brain skills that make up something called “higher thinking”?

Take your brain for a test drive with this word game!

**WARM UP YOUR ENGINE:** Quick! Spell your first name out loud. That was easy, right? Here’s why: You probably write your name 20 times a day, making the spelling of your name “known” information. That’s why you can do it so quickly! You merely need to pay attention to the instructions and remember them long enough to spit out the answer. It’s what we call “automatic processing.” *Now try this...*

**PUT THE PEDAL TO THE METAL:** Quick! Spell the name of the continent you live in—but spell it backwards! Not so simple, right? Here’s why: To do this, first your brain has to determine if this is “known” information or if this is going to take some figuring out.

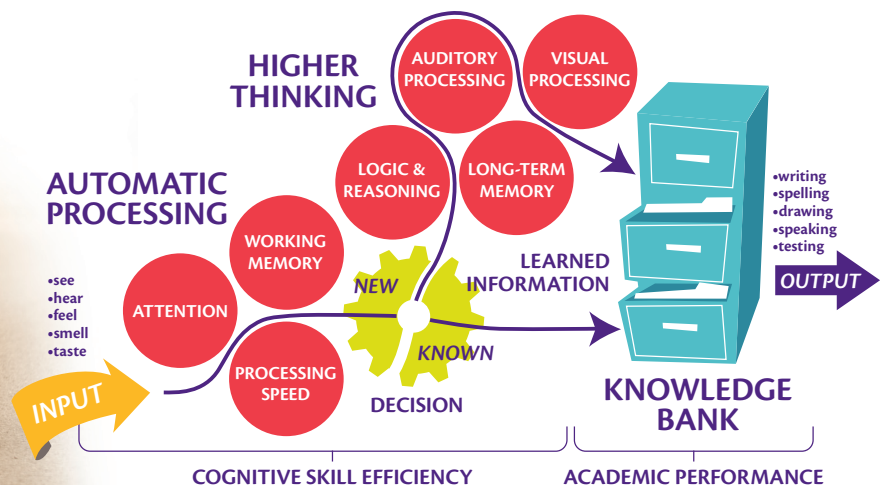
If it’s going to take some figuring out, your brain engages your “higher thinking skills.” Higher thinking skills include long-term memory (which reminds you of the name of your continent). Another higher thinking skill is logic & reasoning (which allows you to figure out how you want to

solve the problem). If you decide to solve it visually, visual processing skills allow you to “see” the word as a picture in your head and “read” the letters from right to left. If you decide to solve the problem by sound, auditory processing skills allow you to repeat the word a few times so you can “hear” the sounds, then retrieve the letter codes that make up those sounds.

However you solved it, congratulations! With this one word game, there’s a good chance you got to take most of your brain skills for a spin! Good job!



**WORD CHALLENGE:** Pick a partner and challenge each other to a backwards word duel. Use a dictionary to choose especially tricky words like: RHINOCEROS.





# DECK-O-CARDS



**No sleight of hand involved! A simple deck of cards can help you strengthen your brain!**

These games build mental processing speed by using a deck of cards.

## GAME 1

Shuffle the cards thoroughly, then sort the cards into three piles. While you're sorting, count by twos out loud. Can you sort and count at the same time without getting mixed up?

### PILE 1

Red cards ace through 10

### PILE 2

Black cards ace through 10

### PILE 3

All face cards

## GAME 2

Shuffle the cards thoroughly, then sort the cards into three piles. While you're sorting, count by threes out loud. A little harder, isn't it?

### PILE 1

Red cards ace through 10

### PILE 2

Black cards ace through 10

### PILE 3

All face cards

## GAME 3

Shuffle the cards then sort the cards into eight piles:

### PILE 1

Ace through 10 of hearts

### PILE 2

Ace through 10 of spades

### PILE 3

Ace through 10 of clubs

### PILE 4

Ace through 10 of diamonds

### PILE 5

Face cards that are hearts

### PILE 6

Face cards that are spades

### PILE 7

Face cards that are clubs

### PILE 8

Face cards that are diamonds

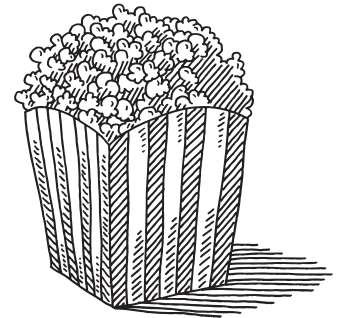
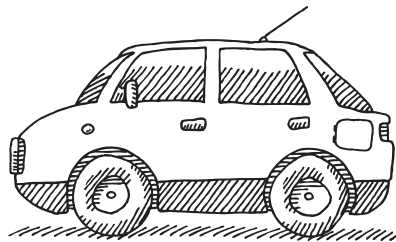
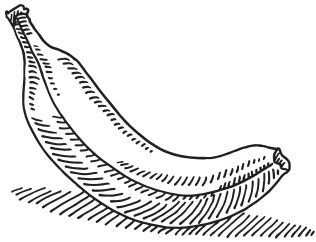


**BRAIN BONUS:** Now try all three games again and keep track of your time with a stopwatch. With a little practice, how much time can you shave off each game? Can you cut your time by a third? If you REALLY work your brain (can you feel that mental sweat?) can you cut your time in half?

# PICTURE THIS!



Here's a quick way to memorize a list of, well...anything!



Pretend you are going to the store with a list of crazy things to buy but—oh no!—you don't have a pen or paper with which to write down the list! Can you remember every crazy thing on the list without writing it down?

In a minute, have someone read the list to you slowly, saying one item and then waiting five seconds before saying the next item.

Every time you hear an item, picture it in great detail. Imagine color, shape, even actions. Then, when you hear the next item, connect it in some way to the last item.

Let's practice. The first item on the list is going to be "Bananas." Picture the bananas in colorful detail. Are they sitting on a counter? Hanging from a tree? Are they yellow or

green? As you are imagining these bananas, you're going to hear the next word, which will be the word "Car." How will you connect the two? What if you pictured one of the bananas growing wheels and turning into a car? Don't worry if what you imagine is silly—the sillier it is, the better you'll remember it!

The third word you're going to hear is "Mosquito." (A mosquito would be a crazy thing to buy at a store, but we warned you this was a crazy list!). How can you connect "Car" and "Mosquito"? Maybe you can imagine the trunk of the car popping open and a mosquito flying out!

The fourth word you're going to hear is "Popcorn." How are you going to connect the word "Mosquito" with "Popcorn"?

Perhaps when the mosquito pops out of the trunk of the car, he is holding a big bag of popcorn!

You get the idea.

Now have someone slowly read to you all 10 items on the list. When he or she is through reading, see if you can repeat the entire list from the very beginning, using the pictures in your mind to help you.

Now make up your own list of 10 things and memorize that list using this game (Then try 15 things, then 20...)

Before long, you'll be wowing your friends! Have someone read a list of items to you, slowly, one time. They'll be amazed when you can repeat the whole list back to them without a mistake!

Here is a list of things to buy at the store. Have someone read each item on the list to you (remind your reader to wait five seconds before reading the next item on the list). Create pictures in your head, then say the whole list by memory!

- ❑ Bananas
- ❑ Car
- ❑ Mosquito
- ❑ Popcorn
- ❑ Elephant
- ❑ Rice
- ❑ Candy
- ❑ Football
- ❑ Shark
- ❑ Sunglasses

# QUIZ-O-RAMA



## Can you answer these questions about your brain?

Here's a fun multiple choice quiz that reveals lots of interesting secrets about your brain!

1. According to neuroscientists, your brain
  - a) is "plastic," meaning it can be changed
  - b) feels like rubber
  - c) is locked and unchangeable after the age of seven
2. The number of neurons in your brain is approximately
  - a) the same number as there are stars in the Milky Way
  - b) 10 million
  - c) 100 billion
3. Brain trainers are kind of like
  - a) teachers, because they teach you interesting facts about the brain
  - b) personal trainers at the gym, because they use intense exercise to increase speed, efficiency and skills in part of your body (your brain)
  - c) Dog obedience school instructors, because they teach your brain to do things like "sit" and "roll over"
4. The human adult brain weighs about
  - a) .680 kilograms
  - b) 1.13 kilograms
  - c) 1.59 kilograms
5. When you are awake
  - a) your brain produces enough electricity to power a light bulb
  - b) you use about 10% of your brain
  - c) your brain releases a growth hormone that, well, makes you grow
6. On average, people get higher IQs by 15 to 20 points
  - a) the minute they turn 13, because teenagers know everything
  - b) as soon as they cut their weekly TV-watching hours in half
  - c) after working with a BrainRx brain trainer for 12 to 24 weeks
7. Something your brain cannot do is
  - a) make new neurons
  - b) feel pain
  - c) compensate for brain injury by rerouting communication pathways around damaged parts of the brain



Correct answers:

1) a. The other term scientists use to describe the plasticity of the brain is "neuroplasticity." Best yet, your brain is "plastic" your entire life, meaning you can improve how your brain performs even when you're in your 70s, 80s, 90s and beyond! 2) a and c. There are an estimated 100 billion stars in the Milky Way, about the same number of neurons in your brain! 3) b. Brain trainers don't deliver information like teachers or tutors. Instead, they exercise your brain and help you practice and develop skills. In that way they are more like a personal trainer at the gym than anything else. Woof woof. 4) c. 1.59 kilograms. 5) a. Your brain can power a light bulb (don't you feel brighter knowing that?). 6) c. After 12 to 24 weeks of BrainRx brain training, kids and grown-ups test an average of 15 points higher in IQ! 7) b. Your brain can make new neurons, it can reroute communication pathways, but it cannot feel pain.



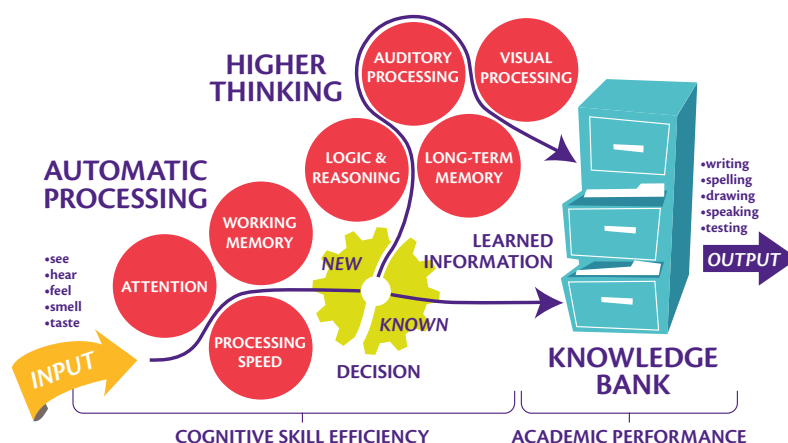


# What's the big deal about BRAIN SKILLS?

The activities in this Game Pack are designed to exercise your core brain skills of attention, working memory, long-term memory, processing speed, auditory processing, visual processing, and logic & reasoning.

*Here's why that matters:*

Whether you're reading a book, studying for a test, discussing something with your boss, chatting with a friend or even driving a car, your brain is being bombarded with information from all five of your senses.



All that **incoming information** is processed through these seven core skills. Like cogwheels in a machine, **these core brain skills work together** to move information into **stored knowledge**.

**What happens if even one brain skill is weak?**

- If even one of these skills is weak, it can keep your brain from fully processing incoming information.
- This can create frustrating challenges with reading, learning, memory, attention and more.
- When problems like these are rooted in the brain, solutions need to focus on...you guessed it! The brain! Solutions that don't change the brain (like hiring tutors or simply "trying harder") might get you through a class or project, but they're not designed to address the problem at its source.

**Neuroscience to the rescue!**

Every day, your actions (and even your thoughts!) stimulate your brain to make changes in both structure and



function. This amazing ability is called neuroplasticity, and your brain can do it no matter how old you are.

At BrainRx, we work with clients aged 7 and up, using intense mental exercises to stimulate targeted changes in the brain. The changes are dramatic, scientifically measurable and permanent. More importantly, they create life changing improvements in how the brain thinks, reads, learns, reasons, remembers and even pays attention.

Your brain skills not only determine your IQ, they have a lot to say about how successful you are in school, on the job, in sports, even behind the wheel of a car. They impact your relationships, both professional and personal. They also play a big role in your quality of life as you age.



# A QUIZ FOR MOMS & DADS

If your child is struggling with grades or homework, should you hire a tutor or a brain trainer?

## Read this first:

Tutoring redelivers information.  
Brain training changes the brain.

*Here's what you need to know:*

**The flu, maternity leave or jackhammers?  
Hire a tutor.**

If your child missed classroom content because he or she was home with the flu, a teacher on maternity leave was replaced by a string of substitutes, or construction workers nearby were operating jackhammers all month long, hire a tutor. In other words, if identifiable circumstances have interfered with the delivery of information to your child, hiring someone to redeliver that information is a great solution.

**Recurring struggles with grades, reading, homework or attention? Hire a brain trainer.**

If information was delivered well and your child is still struggling, you don't need a tutor. You need a brain trainer. In fact, studies show that roughly 80% of all learning or reading struggles are caused by a weakness in one or more of the brain's seven core cognitive skills: attention, processing speed, working memory, logic & reasoning, long-term memory, auditory processing and visual processing.<sup>1</sup> BrainRx targets and strengthens each of these skills.

**LEARNINGRX** is the parent company of BrainRx and the premier one-on-one brain training company in the world, with more than 80 brain training centers across the nation, and brain training programs in more than 20 countries around the world.

1. To learn more about the 80% figure, go to:  
[www.learningrx.com/downloads/80-percent.pdf](http://www.learningrx.com/downloads/80-percent.pdf)

## Then take this quiz:

Should you hire a tutor or a brain trainer? Read both columns and check the box next to any statement that applies:

### COLUMN A

Your son or daughter...

- ☐ is struggling as a result of missing classes due to illness or vacation.
- ☐ is struggling as a result of moving to a new school, or relocating frequently.
- ☐ is struggling in a single class due to poor presentation of information (inexperienced or absent teacher, missing class materials, etc.).
- ☐ shows a special gifting or passion, and you want someone knowledgeable in that subject to tutor your child at an advanced level.
- ☐ catches on right away if a concept needs to be explained a second time.

### COLUMN B

Your son or daughter...

- ☐ has received tutoring in subjects for which he or she still struggles.
- ☐ is struggling in more than one class.
- ☐ has always disliked or struggled with reading.
- ☐ takes a long time doing homework.
- ☐ has chronically struggled in school or with tests.
- ☐ has to work harder or longer than other kids to achieve good grades.
- ☐ does well in school and wants an even greater competitive edge in academics.
- ☐ says he or she feels stupid, can't succeed, or isn't as smart as other kids.

**HIRE A TUTOR** if you checked one or more boxes in Column A (and none of the boxes in Column B).

**HIRE A BRAIN TRAINER** if you checked one or more boxes in Column B (regardless of how few or how many boxes you checked in Column A).





What do we do at BrainRx?

# WE CHANGE THE BRAIN

How much can BrainRx improve brain performance for kids and adults of every age?

“I can concentrate more, I think faster than I used to, and most importantly I remember so much more!”

—17-year-old BrainRx student

“Srujan has a learning disability and it had been difficult for him to learn new things, focus on studies and any activity which requires multitasking. He had trouble with writing and I always had to read back to him to make him understand his lessons. But after completing a few sessions, I noticed concrete improvements in him. He started writing in school without coaxing and also reads much faster and comprehends what he is reading at the same time. Even his teachers have noticed the improvements in him.”

—Mother of a BrainRx student

“We have been receiving a lot of positive feedback from my son’s teachers. Not only that, but my son seems happier and takes more initiative.”

—Father of a BrainRx student

“It took about six months after I heard of this program to actually take the step and enroll my daughter, a step I will never regret. The homework struggle, the forgetfulness, and distractions all seem to be something from the past. At school, her teacher felt a big shift in her attitude in class. She wants to participate, she has original ideas, and her math level has risen. Last week, her dad could not believe the speed with which she was able to calculate a problem!”

—Mother of a BrainRx student

“Our son was into his teens early this year and showing all signs of being impatient, angry, restless and suffering from attention disorder. We could not make him sit in front of the books for more than 15 minutes. But ever since he joined BrainRx, we have seen a remarkable change, not only in his concentration levels but also in his attitude. He has become more independent and trusts in his own ability to learn and understand new concepts.”

—Mother of a BrainRx student

**Visit BrainRx.com to find a BrainRx Brain Training Center near you.**



Mention coupon code **BrainyPack** and receive initial cognitive skills testing at a discounted price. Contact a BrainRx Brain Training Center for details.

If you liked this Game Pack, you’ll probably enjoy other fun freebies for parents and kids from LearningRx. Go to [www.learningrx.com/moregoodstuff.htm](http://www.learningrx.com/moregoodstuff.htm) for more.

