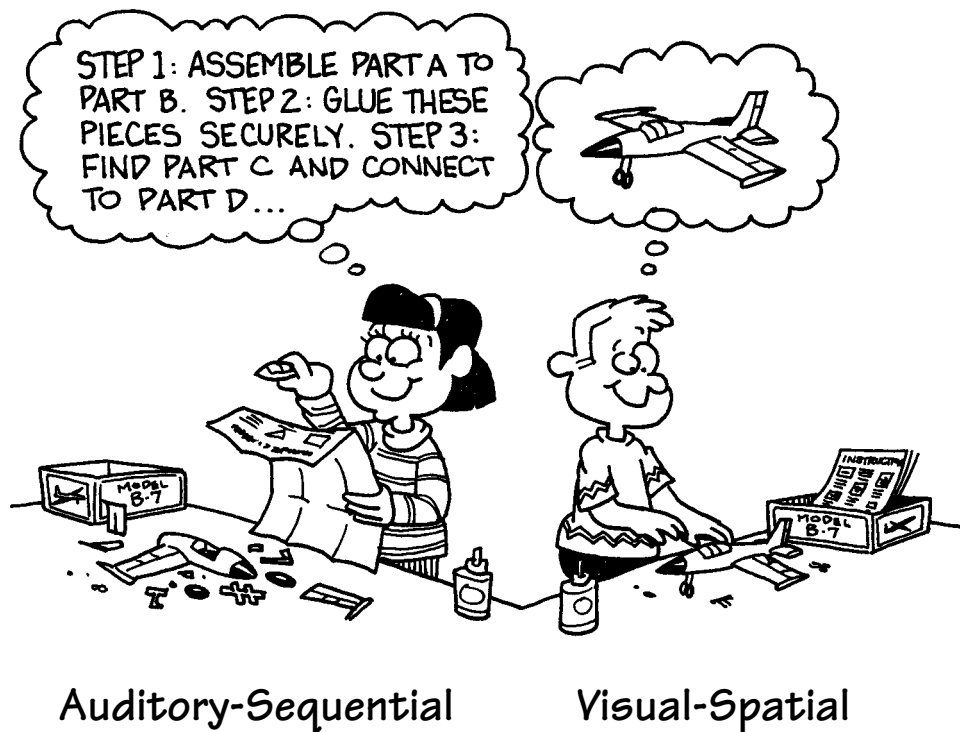


# If You Could See the Way I Think

## A Handbook for Visual-Spatial Kids



Alexandra Shires Golon

## **Dedication**

For all the Kiwi, Aussie and American kids who taught me how to see the way they think. Thank you!

And a special thank you to the kids of "Mr. B's" class, particularly Naomi, for testing out my ideas and reviewing this manuscript.

# If You Could See the Way I Think

## A Handbook for Visual-Spatial Kids

Alexandra Shires Golon

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ISBN	1-932186-09-3	\$18.95
05 06 07 08 09	0 9 8 7 6 5 4 3 2	

## A Note to Visual-Spatial Kids Around the Globe

While writing this book, I was fortunate to work with children not only from my country, America, but with kids from New Zealand and Australia, too. I learned so much from all of them. Most importantly, I learned a message that I want to share with you: No matter where you're from, there are kids—LOTS of kids—who think and learn just like you. And each one feels alone. But you're not. Kids in New Zealand have the same stress and concerns as kids in Australia do and as kids in America do. And likely the same concerns as kids in other countries, too! For the most part, you all hate timed tests. You all know more than others think you do. You all have difficulty memorizing your times tables. You have wonderful gifts in common, too. You all love puzzles and mazes and building. You enjoy music, drama and art. You can come up with great solutions to problems that others never think of. You all have fantastic imaginations and tremendously strong right hemispheres of your brains.

The differences between our countries are minor and fun to discover. There were many comical moments during my trip Down Under surrounding the differences in our language, even though we all speak English. I learned new meanings for common words like "boot" for the trunk of a car, "trundler" for a shopping cart, "The Continent" for Europe, "mozzies" for mosquitoes, "biscuits" for cookies, and "serviette" for a paper table napkin. I also learned several new phrases like, "do up" for fasten (as in your seatbelt), "give way" for yield, and "don't have a domestic" for don't argue!

Spelling differences were very interesting. One Australian boy got very excited when he thought I was recommending the use of Hummers (tank-like, military vehicles popular in the U.S.) when he read my overhead which recommended the use of "humor" ("humour" to non-Americans!). Here are some more spelling and word choice differences of terms you'll find in this book:

<u>American</u>	<u>(Nearly) Everybody Else!</u>
Color	Colour
Humor	Humour
While	Whilst
Learned	Learnt
Organize/ Organization	Organise/Organisation
Visualize/Visualization	Visualise/Visualisation
Memorize/Memorizing	Memorise/Memorising
Questions	Queries
Mom	Mum
Sports	Sport
Math	Maths
College/University	Uni or University
Elementary	Primary
Middle School	Intermediary School
High School	Secondary/High School/ College

I honestly don't know why American English has a different spelling of so many of these English words. While I was in Brisbane, a man was teasing me about why Americans were the only ones who spelled (spelt) certain words differently (Canadians, Great Britons, New Zealanders, Australians and Singaporeans all tend to spell English words the same). I answered that I had no idea but, since Americans invented cars, why was everybody else driving on the wrong side of the road! Sure, differences exist between us, but I want you to know that we are actually more alike than different. The similarities are what forge lasting friendships. Since this book is being published in America, I'm going to use American English and hope that all my new friends Down Under will forgive the odd spellings.

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## Chapter One

### Learning Styles: Auditory-Sequential or Visual-Spatial

If this book was a gift to you, I'm guessing a parent or teacher bought it because they suspect you are a visual-spatial learner. Or, maybe you took a test and it showed that this is the learning style you prefer. Or, maybe because you seem to learn like others who are visual-spatial, someone who understood this learning style believes you are this kind of learner. I'm a mom who figured out a couple of years ago that my kids, Sam and Matt, are visual-spatial learners. I also learned how important it is to understand how different kids learn if you want to help them succeed in school or to homeschool them, like I did. It's important to understand each other's learning styles just to communicate well and get along!

Learning styles affect not only how we learn, but how we make and keep friends. They affect our relationships with our families, too. I use a lot of stories from my sons' lives in this book, especially Matt's, because he's **very** visual-spatial. I hope that their stories help you learn more about yourself, your friends and your family members, no matter what their learning style.

Which one is most like how you think and learn?



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There are two types of learners: visual-spatial and auditory-sequential. Visual-spatial learners, or VSLs, are people (kids and adults) who think in images. Believe it or not, not everyone thinks and learns this way! Auditory-sequential learners (sometimes I'll call them just "sequential") think and learn in words—no pictures at all. If you're visual-spatial, I'll bet you can't even imagine thinking in words, right? The same is true for sequential learners: they can't imagine being able to think in pictures! Some people can think in both pictures and words, but that is rare. See the kids in the cartoon on page 1 (or on the cover of this book)? Neither one is happier than the other, nor is either one doing anything better or more efficiently than the other. Certainly, neither is doing anything wrong compared to the other. Each kid is thinking and assembling the way that works best for him or her. One is putting the model together in a step-by-step, follow the directions style, the other is completing the project from a picture stored in his mind. There's no right or wrong way to assemble the model just as there's no right or wrong way to think and learn. There is only what works best for you.

Here's a quick overview of the two types of learners:

<b>The Auditory-Sequential Learner</b>	<b>The Visual-Spatial Learner</b>
Thinks mostly in words	Thinks mostly in pictures
Has auditory strengths	Has visual strengths
Is a step-by-step learner	Is a whole-part learner
Learns by trial and error	Learns concepts all at once
Attends well to details	Sees the big picture
Follows oral directions well	Reads maps well
Does well at arithmetic	Does well at math reasoning
Learns phonics easily	Learns whole words easily
Can sound out spelling words	Can spell words by visualizing
Can write quickly and neatly	Can keyboard well
Can show steps of work easily	Arrives at correct solutions intuitively
Learns well from instructions	Develops own methods of problem solving
Is comfortable with one right answer	Likes problems with many possible answers
Is academically talented	Is creatively, technologically, mechanically, emotionally or spiritually talented

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If you're a visual-spatial learner and you think like most of the VSLs I've known, your thoughts are like movies playing in your mind. Most of the kids I've talked to say their mental pictures are in color and have so much detail, they can almost reach out and touch them. Matt stores some of his pictures on shelves or in filing cabinets. Sometimes his pictures move on a conveyer belt until he comes across the one he wants. One visual-spatial adult told me she has a chalkboard in her head that she uses to see her To Do lists.

Another thing about visual-spatial learners is that they prefer to get the big picture first, then the details. So feel free to jump around to any part of this book that has the information you need right now. If you need help memorizing your times tables, skip right now to Chapter 8. Spelling tests have you frustrated? Jump over to Chapter 6. Poke around and find what you need; there's no need to read this book in the order I've written it. Feel free to fold the corners of pages that interest you, mark any of the text with a highlighter, write notes (or pictures!) anywhere you'd like, or use colored Post-It tabs to mark pages you want to return to. I want this book to work for you, so use it as you see fit.

This book is full of strategies to help you in math, spelling, taking meaningful notes, creating reports, as well as getting and keeping you organized. Pick and choose what you want to learn about. Have fun discovering how your brain works. Then, thank your lucky stars that you think and learn this way. Your strengths are a true gift. The careers of your future will rely on the skills and talents you were born with. The jobs available to you when you reach adulthood haven't even been dreamt of yet.

If you're a visual-spatial learner, the right hemisphere of your brain is your best friend! (The next chapter will help you find out if this is your learning style.) If you treat your right hemisphere well, it will help you in everything you do. You must provide colorful images for it to store away, because boring words put it to sleep. And, if your right hemisphere is asleep, you can forget about learning. For you to succeed,

your right hemisphere has to be turned on, focused and continually creating images. Do not allow your right hemisphere to drift off in search of excitement. Create movies in your mind's eye for what you are listening to, especially lectures from your teacher. Take your notes in pictures. Add details of what you're learning to your drawings as you listen. (I'll show you how in Chapter 7.) Create funny stories to remember your spelling words or historical information. You'll see how in Chapters 6 and 11.

OK, are you ready? Let's find out your learning style!

## Chapter Two

### Are You a Visual-Spatial Learner?

Ideas came into my mind quite unrelated to graphic art, notions which so fascinated me that I longed to communicate them to other people. This could not be achieved through words, for these thoughts were not literary ones, but mental images of a kind that can only be made comprehensible to others by presenting them as visual images.

M.C. Escher

On the next page are some traits that are typical of VSLs. Not every characteristic may fit you. There's more information about each of the questions following the questionnaire, if you need it.

# Are You a Visual-Spatial Learner?

Please complete this quiz to find out more about your child's learning style.

	Yes	No
1. Do you think mainly in pictures instead of in words?		
2. Are you good at solving puzzles or mazes?		
3. Do you like to build with LEGOs™, K'Nex™, blocks, etc.?		
4. Do you often lose track of time?		
5. Do you know things without being able to tell how or why?		
6. Do you remember how to get to places you have visited only once?		
7. Can you feel what others are feeling?		
8. Do you remember what you see and forget what you hear?		
9. Do you solve problems in unusual ways?		
10. Do you have a wild imagination?		
11. Do you love music, dance, art or drama?		
12. Can you see things in your mind's eye from different perspectives?		
13. Do others think you are unorganized?		
14. Do you love playing on the computer?		
15. Do you have trouble spelling words correctly?		
16. Do you like taking things apart to see how they work?		

If you answered **yes** to at least **nine** of the above questions, you are most likely a visual-spatial learner.

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So, how did your questionnaire turn out? Are you able to tell if you're a visual-spatial learner? You might find the following explanations and scenarios to each of the questions interesting. If you had trouble answering any of the questions, read the rest of this chapter and see if the questions become easier to answer. You don't need to answer YES to all of them. But if you think that at least **nine** of the questions apply to you, you can count yourself one of the fortunate who favor a visual-spatial learning style. (I'll tell you why this is such a gift throughout this book!)

### **1. Do you think mainly in pictures instead of in words?**

My oldest son, Sam, can switch between thinking in pictures and thinking in words. So when I asked him this question he said, "**Both!**" If you're not sure, try this trick. I'm going to ask you to think of an answer to something, but before you do that, remember to notice whether you look to your upper left or to your upper right while you are answering the question. OK, how do you spell your last name backward? If that's too difficult, try spelling your first name backward. If you look to the upper left to "see" your answer, you are using the right hemisphere of your brain. If you look to your upper right, you are using your left hemisphere. If you look straight up, you might be relying on both hemispheres. This is really a gift because you might be able to use either side of your brain depending on which strength you need. If you use your left hemisphere more (meaning you looked to your upper right when you thought about your answer), you are auditory-sequential. If you use your right hemisphere more (meaning you looked to your upper left when you thought about your answer), you are likely visual-spatial.

### **2. Are you good at solving puzzles or mazes?**

Lots of VSL kids I know are amazing with all kinds of puzzles: jigsaw, three-dimensional and others. I've heard stories of very young children turning the pieces to a jigsaw puzzle over so they could assemble them by the shape only, with the

brown side facing up! Other kids have written that they mix all the pieces of several puzzles together in order to make it more challenging. Can you find your way through mazes? What about three-dimensional puzzles or games like Rush Hour™? Shape by Shape™? Tangrams? Are you good at solving these, too? Then answer yes!

### **3. Do you like to build with LEGO™, K'Nex™, blocks, etc.?**

What type of learner do you think creates those spectacular LEGO™ sets? Gotta be a visual-spatial! The directions don't even come with words, only pictures! You need to be able to manipulate objects in your mind's eye in order to create all the amazing figures they come up with using just squares and rectangles. The same is true with K'Nex™, Zome™ and lots of other construction toys. Do you like to create with stuff your mom almost threw away? Matt is only allowed a certain amount of tape every week because he's constantly building and creating with toilet paper rolls, empty tissue boxes and whatever else he can get his hands on!



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#### **4. Do you often lose track of time?**

Have you ever been playing with one of your most favorite toys when one of your parents asks you to get ready to leave for school? Have you ever found yourself answering, "OK, I'll be there in a minute," but then 15 minutes will pass and you haven't moved? And then you've got an angry parent and you're left scratching your head wondering why they're so upset when they only asked you a minute ago. Do you ever find yourself thinking, "How can it be time for dinner already, I just got home?!"

Most VSLs don't have a very good idea about how time flies when they're having fun. Understanding how time passes may not be your strength, but understanding space probably is. I'll bet when you're in a building, you're very aware of what room is directly above or below you. I'll bet you can find the staircase in a new building, right? Can you easily find the escalator in a department store?

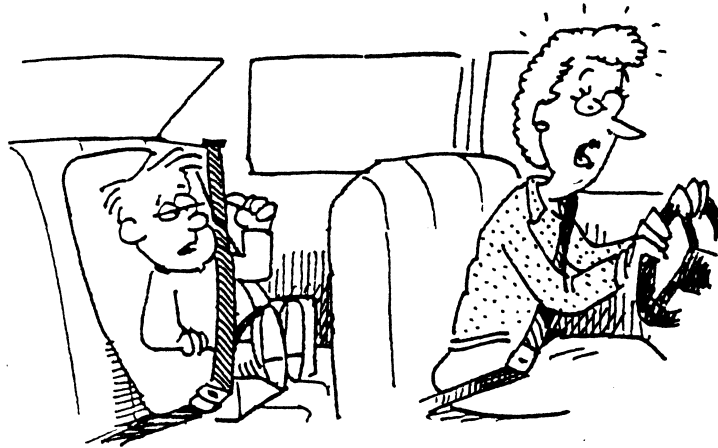
Unfortunately, understanding time is really important because most of your life runs on a schedule that you don't have much choice about. School usually starts at a specific time. Sports practice, music lessons and dentist appointments all happen at a precise time. Your entire day is filled with places to be at a certain moment. Being late can mean being in trouble. Hang in there, in Chapter 12 I'll give you some tips to help you realize how much time has passed. Plus, this book will help you organize your activities in a way that's comfortable for you, so that you don't find yourself racing out the door without your shoes!

#### **5. Do you know things without being able to tell how or why?**

This happens to me a lot! If you answer yes to this, it's almost as though you have ESP (extra-sensory perception) or really great intuition. Some VSLs just know how certain things work (like computers) or how to take something apart and fix it, even if they never have before. Do you do this? Do you remember information from something you've read

somewhere, even if you don't remember where? Most VSLs have pictures in their minds and they don't even know how those pictures got there. The best part is, the pictures of how to repair things are almost always right! And, because they're images, they'll probably never leave your brain!

**6. Do you remember how to get to places you have visited only once?**



“MOMMY, YOU MISSED YOUR TURN.”

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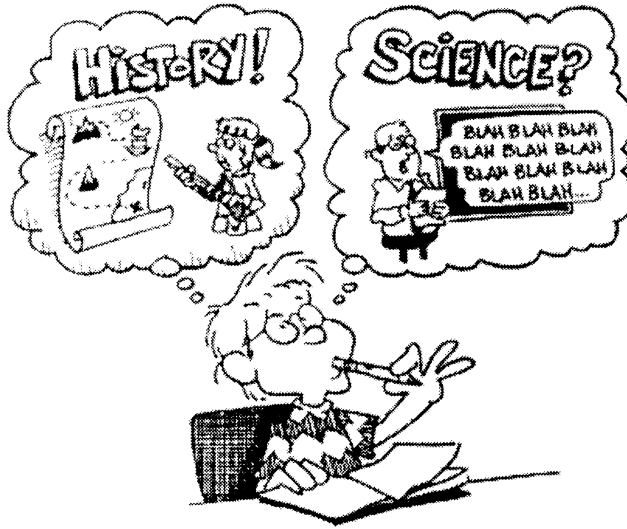
This cartoon is actually from my life. That's Matt letting me know I've gone the wrong way. Both of my children seem to be pre-wired with Global Positioning Systems (GPS) in their brains. Are you? Do you find yourself wondering why others can't picture exactly how to get somewhere when the route seems obvious to you? When you visit a new city, do you know which way is north? Can you find your way back to where you started? When you go to a building or a store, do you immediately know where the car is parked?

**7. Can you feel what others are feeling?**

Have you ever walked into a room and known right away who was having a bad day? Or who was feeling particularly sad? Lots of VSLs tell me that they just sense when someone needs a good hug. This is a really incredible gift. The ability to read another person's emotions will help you throughout your life. If you know that today is not a great day to ask for

that new, expensive computer game, you can wait until a better time and save yourself a lot of grief!

**8. Do you remember what you see and forget what you hear?**



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When your teacher gives a lecture, are you more likely to remember what was taught if there were overheads, maps or pictures used? What about if the teacher has you create something to go with what you're learning? Does that help you remember it better? Does new information stay locked in your brain if you have a picture to attach it to? When you listen to instructions or directions, are you able to create images in your mind of exactly what is being asked? What happens if the directions are only in words? Many VSLs need a visual image of what is being asked of them in order for them to get the job done.

**9. Do you solve problems in unusual ways?**

Do people say to you, "Wow, how'd you think of that?" Do your answers seem obvious to you, but not to anyone else? Visual-spatial learners naturally think "outside the box," coming up with answers that others never think of. You don't need anyone to teach you how to do that! (I once met a ten-year-old visual-spatial girl who had begged her mom to save a large box. She said, "I need the box so I can think outside

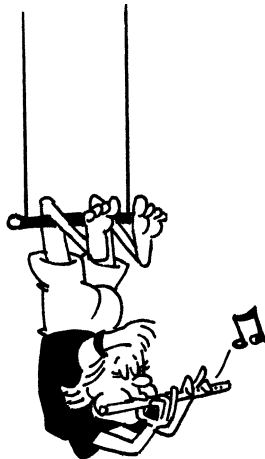
the box!") If you naturally think of creative and unusual ideas you have a great talent. But you may have to wait until college or your career to appreciate what a gift that is.

### **10. Do you have a wild imagination?**

Can you tell fantastic stories? Do you make up role-playing games? Some VSLs can create mental images so real that they can feel, touch or even smell what they are imagining! Are you able to take common household items and turn them into new and fun inventions? Matt once built a bowling alley out of toilet paper and paper towel rolls and LOTS of tape. The ball even returned to him after making it through a maze of tubes.

VSLs find joy and excitement in everything they do—even if it's something as simple as watching the bugs in the grass. But they often become bored and tune out when listening to lectures. Some teachers call this daydreaming. Others might think they have a problem with attention. This book was written to help you use the stronger hemisphere of your brain, the right hemisphere, in everything you do. You do this by using humor, color and detailed mental pictures. You can remember even boring stuff. It's easier to stay focused when learning is meaningful and fun. It's also easier to remember what you have learned. I'll show you how throughout this book and especially in Chapter 11.

### **11. Do you love music, dance, art or drama?**



Visual-spatial learners are often talented artists. Some find they love to paint or build, or that they love to play a musical instrument, to sing or to dance. Others enjoy pretending they are characters from books and movies.

You don't have to be really talented at music, art or drama to answer YES to this question. You can just enjoy listening to music or going to art

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museums or plays. You are an appreciator! Artists need people who can appreciate their work. Do certain pieces of music seem to call out to you? Do certain paintings speak to you? Lots of visual-spatial kids can create art, others have a deep appreciation for the arts.

## **12. Can you see things from different perspectives?**

When you are looking at a flat, two-dimensional picture of a building, can you imagine what the opposite side looks like? Can you picture your home from a bird's eye view? When you are in a two-story building, can you tell what room is above or below the room you are in? A boy I met in Sydney loved designing automobiles. He could envision every part of a car in his mind's eye, even the under carriage.

The ability to turn things around or upside-down in your mind can sometimes cause problems with reading. The letters can roll and flip in your mind so that one letter becomes another. Some visual-spatials have trouble reading and writing because the letters p, b, d and q are the exact same shape. If you have trouble handwriting because your letters turn and twist in your mind's eye, you should learn to keyboard. The letters p, b, d and q are P, B, D, and Q on a keyboard so you won't get them mixed up. When you keyboard, you're using both of your hands to write, which means both hemispheres of your brain are at work. Anything that keeps both hemispheres active helps you succeed! Also, if you are left-handed, keyboarding may be much easier for you because you won't be smudging your work anymore. I have a lot more information about keyboarding in Chapter 5.

### 13. Do others think you are organizationally challenged?



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Does your room look like this boy's filing cabinet? Are you able to find what you need when you need it? Lots of people think that the boy needs help getting organized. But, if he can find just what he needs just when he needs it, then his organization system works just fine for him. In fact, if someone were to force him to find a home for every piece of paper, it would cause him to lose the picture in his mind of exactly where his papers are. Now, if you can't locate your homework assignment, or the right LEGO™ piece when you need it, then you need some help with organization. We'll talk about specific organization strategies in Chapter 10.

## 14. Do you love playing on the computer?



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Have you loved the computer since the first time you were allowed to play with it? Can you do things on the computer that others can't figure out? Do you teach yourself? Computers were invented by visual-spatial learners who think like you! Only VSLs like you could think up all the possibilities that computers and com-

puter games offer. When you have a strong right hemisphere of your brain, which VSLs do, you can easily learn how to operate computers. Did you know that sequential learners are often intimidated and frustrated by computers? When you get older, you'll probably use computers in every aspect of your life. In this book, we'll explore using the computer for nearly everything you do today, from homework to writing to organization.

## 15. Do you have trouble spelling correctly?

If you do, you are definitely not alone! Spelling has been taught for generations in a sequential manner with odd rules. Who can possibly remember when "i" comes before "e"—especially if the rule is broken so many times? Our written language makes little or no sense. And why is it that even though people in Great Britain, Canada, the U.S., New Zealand, Australia and Singapore are all using English as their primary language, they spell many words differently?

So, how are you going to spell your words correctly? For starters, find and become well acquainted with the spell checker function on your computer. Just like the calculator, this tool will help you with your work. However, beware of homonyms (words that sound the same but are spelled differently, like "bare" and "bear") that won't get caught by your spell checker! Later, in Chapter 6, I'll show you ways to help

pictures of your spelling words so that you can start acing your spelling tests.

## **16. Do you like taking things apart to see how they work?**



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Have you ever taken apart a telephone or an old computer? Do you wonder about what makes things work? Have you ever rescued a broken hair dryer or toaster oven from the trash? Were you able to take it apart and put it back together? Did it work again? Whenever something stops working in my house, I wait until everyone has had a chance to tinker with it before I replace it. When my husband was just seven years

old, he rescued the family vacuum cleaner from the trash pile. After he took it all apart, cleaned it and oiled it, he gave his mom a bill for the work! That same vacuum worked for another ten years.

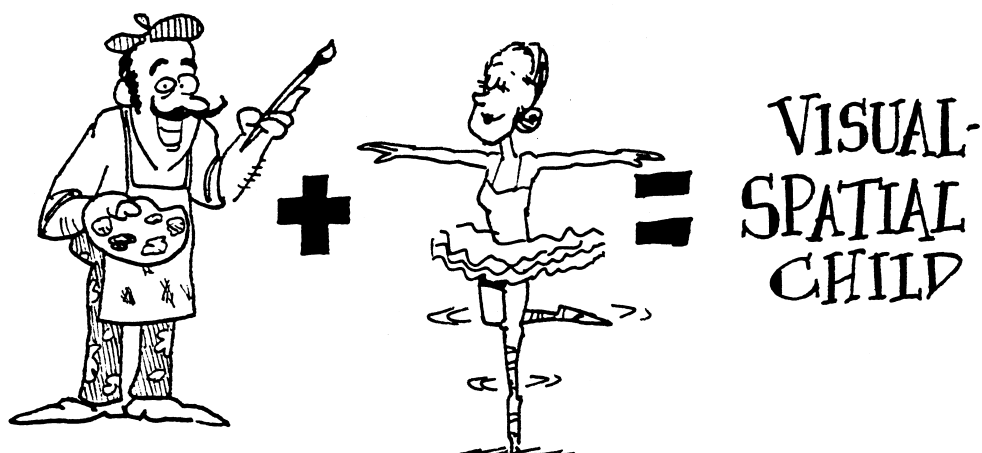
### **Your results**

Now add up all the questions you answered "YES" to. If you have nine or more answered YES, you are probably a visual-spatial learner! Are you surprised? Whether you're just discovering that you are a visual-spatial learner, or you've known for some time, I hope this book will help you to see just what incredible gifts you have. Adults often read books and go to seminars to teach them to think the way you do. Thinking creatively comes naturally to you. Lots of people wish they had some talent in music or art. Some don't understand art. They will never know the joy you feel when you listen to a particular piece of music or gaze at a painting or sculpture. And they will never be able to express themselves in the same artistic manner that you can.



Since the creation of modern school, teachers have been teaching to the left hemisphere, to auditory-sequential learners, in step-by-step directions. This leaves visual-spatial learners out in the cold. For VSLs, the left hemisphere can never become as efficient or successful as the right hemisphere. The right is just stronger for you. It's just like when right-handed people break their right arms. They can learn to write with their left hand, but it will never be as comfortable and the writing won't look as nice as when they write with their right hand.

Do you have a parent that would answer "YES" to at least nine of the questions on the questionnaire? Guess who you got your learning style from?



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Maybe your parents can remember certain tips they used in the areas that are giving you trouble? How did they learn their times tables? Can they teach you? How do they manage to spell correctly? Don't worry if they don't remember, this book is full of tips to help you get through these subjects. But you'd better remember them and teach to your own children someday!

### **Visual-spatial learners in auditory-sequential classrooms**

There is a tiny problem for many VSLs called school. Schools were designed for sequential learners. This type of

learner loves how most curricula are designed: in a step-by-step process. Sequential learners remember what they hear. And they love that learning new material builds on what they've already mastered. School is a perfect fit for how their brains work. Auditory-sequential learners cannot see in multiple dimensions. They cannot easily imagine a different perspective than what they see before them. They can't picture the back of a statue when they are looking at the front. Their minds do not dream up unusual answers to problems. They cannot get to the big picture of an idea until they know all the details. School does not ask them to.

School might seem as though it will last forever. It consumes most of your waking day and life, *right now*. School is a very demanding place with expectations that you do well in a wide variety of subjects.

But, I have great news! School is actually a very tiny blip of your entire life. In adult life, you will **not** be graded on reading, writing, spelling, English, math, geography, history, science, art, music and P.E. You will **not** be expected to perform well in all subjects, every day, as you are in every year of your education. You **will** be able to use your strengths and there will be assistance for your weaknesses. Computers and calculators will be your aids. You may find yourself in a career working with a team of people using your strengths and the strengths of others. Or, you may have a secretary that does your spelling and writing for you. You will look for and find a career that uses the gifts you were born with.

The 21<sup>st</sup> century is an amazing time to be a visual-spatial learner. Your gifts will allow you to be a great surgeon or design beautiful buildings or compose moving music or create exciting computer games or design computer-animated movies or become a musician, artist or dancer. If these career opportunities sound exciting to you, remember that school is an important pathway for reaching your goals. Surgeons, architects, engineers, designers, composers, and artists go through many years of school so that they can qualify for

these jobs. You can make school work to your advantage. Throughout this book, I'll show you how.

What are some careers that interest you? List them here:

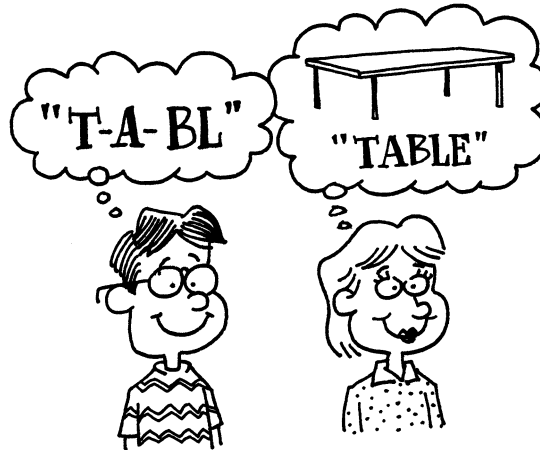
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Do these possible careers use your visual-spatial abilities?



## Chapter Three

### Reading



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Since you're reading this book, you've probably already learned how to read. But, if you have a younger brother or sister, you could really help them out by teaching them to learn to read using whole words, rather than phonics. You can jump to the section about speed reading for information on how to help your own reading. Learning to speed read helps lots of visual-spatial kids get through their reading assignments quicker and remember more.

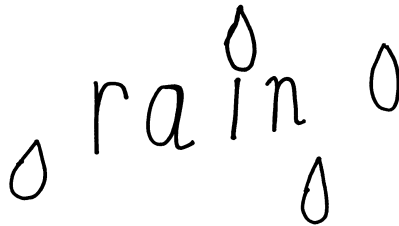
Did you learn to read with phonics? Was it difficult for you? Most visual learners have a hard time with phonics because it's an approach that breaks down words into the smallest sounds like: ra, ta, ga, and fa. Then, you are supposed to build on those small sounds to form whole words. Visual-spatials understand big picture information first, not the smallest details! Because VSLs think in pictures, they need to read in pictures. What is the picture of "ga"? Or of "the"? *Can you create a mental picture of "the"?* When VSLs are taught to read by looking at whole words first, not the smallest sounds, they can make pictures for those words and easily learn them. A student learning to read can make a mental picture for "Brown fox jumps over fence." (Notice the word "the" is missing from that sentence?)

Some words just naturally make you think of a picture because of the shape the letters make; like the letters "M" and "N" do in the word MouNtaiN.



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Or "rain" when you add a raindrop to dot the "i" like Matt did for me.



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You can probably think of more ways to draw words that include pictures. For words that you can't create a picture for (like "an," or "the"), you can make a picture of the word by spelling it out with string, Wikki Stix, or clay. Some schools use letters made out of sandpaper so you can trace over the shape of the letter with your finger. Or, whole words can be placed on cards and hung from a key chain or stored in a special word box you create. Then, the beginning reader can practice sorting all the words with similar starting sounds, similar ending sounds or other categories they think up. This is called analytic phonics and will help any reader become even better. Any help you can give to a younger sibling will help another VSL kid feel just as smart as the kids who learn to read using phonics. There isn't always a single right answer to learning something and phonics certainly doesn't work for every student.

## **Speed reading**

I have one huge tip about reading: speed read! Just like beginning readers have no need for the words "the," "and," "like," and so on, you aren't creating pictures for these words, either. So, just skip them! Practice running your finger, very quickly, over one line of words, then the next. Just jump right over the words that your mind doesn't make a picture for. Most speed readers use their index finger to race under the lines of text as they read. Here's an example. First, read this sentence:

Then, on the following morning, Jody ran to the nearby grocery store to fetch a gallon of fresh milk for his mother.

Now, watch how much easier you can make reading this line by skipping over the words that have no mental picture, by reading only the words that create an image in your mind:

Morning, Jody ran store gallon milk for mother.

Can you do it? Can you skip the picture-less words? Was it easier? Are you missing any facts from the first sentence? Does the second sentence (with much fewer words) still make a picture in your mind of what the character is doing, when and for whom? You don't even need the adjective "fresh" because you know he's buying it that morning, right? Isn't it easier to make a mental picture when you don't have to stop and read the picture-less words? The next time you have a reading assignment, try speed reading and see if it helps you get through your homework faster and still remember all the details.

If you need help remembering the pictures you are creating in your mind, try keeping "notes," or actually drawings. You can do this in the margins if it's your book, or in a separate notebook, if the book does not belong to you. Really important information such as the plot of the story, or dates of information, or names of characters you are studying,

should be included in your drawings. I'll show you how in Chapter 7.

### **Re-reading for important information**

Have you ever found yourself reading a schoolbook and saying, "Whoa, I know that's gonna be on the test"? Did you know this because what you just read had a name or date or definition? When I was in school, I used to fold the corners of the pages that had this kind of important information. But then my teachers would be upset with me because the book had to be used again the next year and the pages would already be "dog-eared." There are so many great products available at office supply stores these days. Here's one you can use instead of folding your corners: get sticky Post-It tabs that come in lots of colors. Use them to show the exact line on a page of the important information you just read. You can stick them right on the line of the text, with the colored tab sticking out off the side of the page. This way, you can easily find the exact line you need to remember. You can use certain color tabs for certain types of information. Maybe green tabs are for dates you have to remember? Or blue tabs are for names? Whatever system works for you. Remember, important information in a book (like definitions) will often be written in a bold or italicized font—tab those lines, too! Lots of tests all the way through school—even college—are vocabulary tests. So each time you come across a new word related to the subject, be sure to tab it.

### **One more note about reading**

If you have difficulty reading, or if you read slowly, you might consider reading comic books or fantasy books with lots of visuals. Maybe books on something you really want to learn about, a favorite animal or children in another country, or something you will find interesting enough to keep trying. You might consider checking out recorded books from a library. Nearly every book you might be asked to read for a book report is available on tape or CD. Don't replace reading with a movie or made-for-TV version, though. Too much of the story may have been changed and you'll miss the chance



to create your own characters and scenes in your imagination. But listening to a book, instead of reading it yourself, will let you use the author's words to create a movie in your mind. Maybe listening to the story will help you remember the plot and characters better because you can "see" the story. When you listen to the story, you don't have to spend your time figuring out the words and forgetting to follow the story line. Unfortunately, there is probably not a recording available for your math or science textbooks, so you will have to read those. Maybe a parent could read along with you (or to you) so you can focus on creating the mental pictures you need to remember the material.

Many books come with larger print size. Maybe that will be easier for your eyes? Or, you could photocopy a book's pages on a copier and make the print size larger. Some kids find reading easier when they use a colored transparency, like yellow or green, and place that over the page. Also, there are books by Barrington Stoke Publications that are printed on special paper using a font that has been proven easier to read for many. You can find these at [www.BarringtonStoke.co.uk](http://www.BarringtonStoke.co.uk).



## Chapter Four

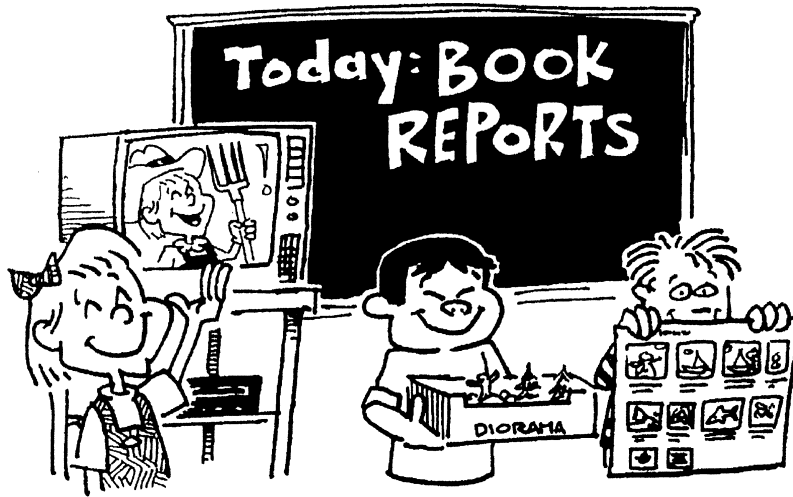
### Creative Writing and Other Written Assignments

Creative writing is one of the gifts of being visual-spatial. You have a wild imagination and a great sense of humor! I'll bet you can think of wonderful stories. But, is it hard for you to organize those great ideas (which are in pictures in your mind), translate them into words and then handwrite them neatly? Most VSLs have a hard time with this. I tell parents and teachers who are not visual-spatial learners to do this exercise: Imagine you are watching a movie that has lots of color, images and emotion. Numerous pictures are flashing quickly before you. Now, stop and write down, in words, all that you see, feel and sense in a logical, sequential report. Most sequential thinkers can't do it. But this is exactly what they ask of you!

Students are often asked to write, in a report, all that they see in their mind's eye. If a "picture is worth a thousand words," and you think in thousands of pictures, how can you find the words you need for your story or report? For many visual-spatial students, it seems an impossible task. Writing becomes an assignment they dread. Many times, visual students create reports that don't even begin to include all of the details that were in their mental pictures.

I have some tips to help you create great reports. First, let's suppose you've been asked to write a book report. Will your teacher let you create something else that shows you understood what you read? Thinking outside the box comes naturally for you; ask your teacher for permission to demonstrate your knowledge in a different way. Start thinking up some fresh ideas for this "book report." What about a video-taped Interview With the Author? You could act like a news reporter! You could show all the important parts of any well-written book report (the plot, the main characters, the climax of the story, even some information about the author, or the inspiration for the story) in an entertaining format. It would

be interesting to create and it would demonstrate your knowledge of the book to your teacher.



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Will your teacher allow you to build a diorama that shows the conflict or the climax of the story? What about making a mini-film of the main events? Or, perhaps a storyboard or a cartoon book? Can you write a musical based on the book? If the book took place during a specific time in history, would you be allowed to design costumed paper dolls to recreate the main scenes?

There are countless ways that visual-spatial learners like you can demonstrate that they have read the material, understood the main ideas and are prepared to report on their learning. It doesn't always have to be a written report. You can show what you've learned in a visual manner. Any project that allows you to use visuals, color, humor or even music, engages your right hemisphere. So, don't be afraid to ask your teacher for permission to do something different!

Now, let's suppose your assignment is to research a famous person in history. John Martin, a popular Middle School teacher at Rocky Mountain School in Boulder, Colorado, asked his students to select a famous scientist from the 1600s. Along with writing a short report, the students were asked to:

- Draw a headstone for their famous scientist's grave. (This required researching the scientist's birth date, date of death, and writing an interesting, appropriate epitaph. It also included art!)
- Create a birth certificate. (This required researching the parents' names, place of birth and date of birth.)
- Create a timeline of events, including the scientist's contributions, as well as other important political events, inventions, music and art of the era, etc. (This allowed the student to see what was happening in the world at the same time the scientist lived.)
- Create a business card for the scientist. (This required an understanding of the profession, the scientist's education and accomplishments, and finding out where the scientist lived or studied. It also included an art component.)
- Write a letter to a head of state (king, queen, president, etc.) requesting funding to continue research.
- Write a newspaper article interviewing the scientist about his or her work.

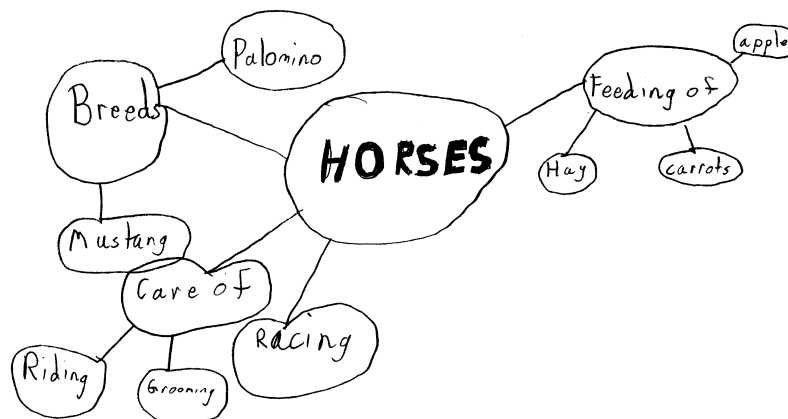
There were other parts of the assignment, but my point is that this teacher understood the importance of including activities that used both hemispheres of the brain to demonstrate what his students had learned. The research and writing he asked for meant students had to rely on their left hemispheres to take notes, keep them organized and write logically. The art and timeline and creative thinking he asked for meant students had to use the right hemispheres of their brains to see the big picture and add fun and interest to the report.

By making the project interesting for his students, Mr. Martin was successful in turning a dreaded research paper into a fun project. It was probably more fun for him to grade than old-fashioned reports, too! If writing standard reports is

difficult for you, ask your teacher for alternative ways to show that you have done the research, learned the material and can teach it to others. You may be surprised to learn what your teacher will allow.

There will be times, however, when a written report must be done. You can help make the assignment easier by organizing your mental images. Use a tape recorder or "webbing" (see the next paragraph) or note cards or specialized software (such as Inspiration® or Kidspiration®) to get your pictures down on paper. Some of the kids I work with have no trouble telling someone everything that would be included in a report. It's the act of writing that causes them to freeze. So why not dictate your report into a tape recorder, then write down what you've said? You can play back the tape and add more as you write, but at least you'll have a starting point.

Webbing is a way of getting all the ideas for your subject on paper, then building from those ideas. For example, suppose your assignment is to write a report about your favorite animal. You are supposed to research the animal and write a detailed two-page report. You can start by creating a web. Because you naturally think about big picture ideas first, a web should be easier to create than a standard outline which starts with small details and builds to a big picture. When you start creating the web, brainstorm all the related ideas you can. No idea is silly or should be thrown out at this stage. (Although you will probably not use every one of these ideas in your final report.) Your web might look something like this:



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Next, watch videos, look up related sites on the Internet, talk to a specialist (perhaps a veterinarian in this case), and read books to gather information on each of the areas you think are necessary for your final report. You should take notes on everything you learn. The notes might be more useful if you write them on color-coded index cards. For example, in our pretend example of a report on horses, you might use green index cards for any information you learn about feeding horses. You might choose yellow cards for the information you learn about various breeds of horses. (You can find colored index cards at any office supply or teacher's supply store.)

Keep in mind that your "notes" don't have to be written words. If you prefer to think in pictures, it may be more meaningful to take your notes in pictures. These could be actual drawings of what you have learned. For example, you could draw pictures of what horses eat, rather than writing the words, "hay," "carrots," and "apples." Hand-drawn images of what horses eat may be easier for you to remember than written words.

Finally, gather all of your note cards with all the information you have researched. Put them in order by color so that all the information about how to care for horses is together and all the information you learned about breeds of horses is together, and so on. The report can be written directly from your note cards with all the facts organized together, by color.

When you begin, don't worry about grammar, spelling or punctuation. Work on those after you get your rough draft written. Just get your pictures into words and onto paper first. After you have created your rough draft, go through it looking only for spelling errors. If you've typed this on the computer, you can use spell-check now. Once you've corrected any spelling mistakes, go through your draft again looking only for punctuation errors. Then go through the report again, looking only for any grammatical corrections. Don't try to catch everything the first time you read through your rough draft—there's too much to look for. Just take it

easy and work through it in steps. (I can't believe I just told you to do something "in steps" but it's the only way your finished paper is going to be written in a logical enough way for a good grade!) Ask someone to help you proofread for homonyms, missed words, etc. Even the finest writers have editors because we all need a second pair of eyes to review our work.

## **Creating outlines**

When teachers assign written reports, they sometimes ask for an outline first. They are taught in teacher training that the first part of writing a report is to put down all of the ideas in an organized format. Many teachers prefer to work with small details that lead toward a big picture. In this case, lots of notes and then the finished report. But visual-spatial learners don't think like that! You see the big picture first and then the small details, so I'll bet writing an outline *first* is probably torture!

There are a number of things you can try to fulfill your teacher's request and still create a report the way your brain works. You can use the software, Inspiration® or Kidspiration®. Or, you can write the report first and then write the outline from your finished report. Let's say that you are going to write a report about a famous inventor. You know that you'll need to include lots of biographical information such as when and where your inventor was born, where your inventor went to school, what were his or her greatest accomplishments, and so on. You can start with a hand-written web like you read about on page 30. If you skipped that section, go take a quick look.

As you research all the ideas from your web, take notes on colored note cards. To create an outline from your notes, just lay the note cards out on a table, or even on the floor. Start with the note cards that have information about the largest circles of your web. Then place the note cards of information about the smaller circled ideas after those. (The smaller circles are more detailed than the larger ones, right? So if



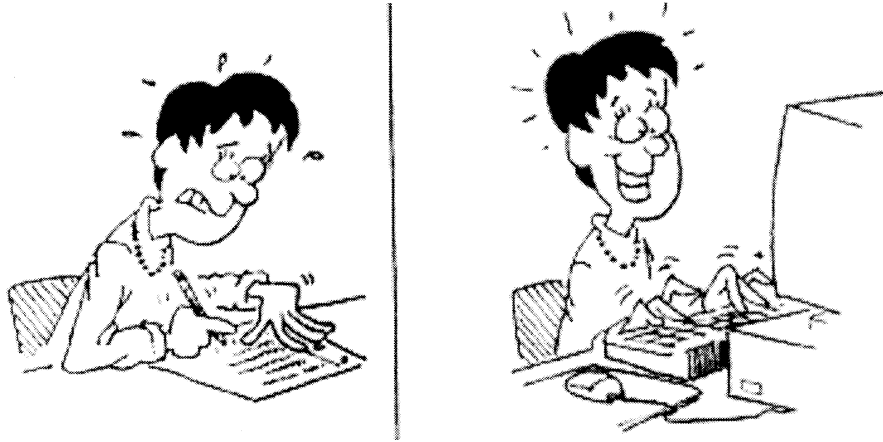
your first large circle is, "What horses eat," then your smaller circles would be all the answers you found, like, "carrots," "apples," etc.) If you've written all your notes of a similar idea on the same colored note cards, then just group them together with the main idea on top of the pile and all the matching cards underneath. When you run out of ideas for small circles on a specific topic, go to the next large circle and gather all the note cards for that idea.

You might actually lay the note cards out in front of you, then take some string and lay it on top of the cards, going from one idea to the next. (I got this idea from another visual-spatial teacher named Steve Haas.) When you pick up the cards following the order of the string, you'll have the flow of your outline. Your report should come together in an organized manner because your notes were strung together in an organized manner—literally!



## Chapter Five

### The Art of Handwriting vs. the Act of Keyboarding



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Now, for the actual act of writing. Nearly every visual-spatial learner I've worked with has had trouble writing neatly. Their mental images come to them so quickly that their hands cannot keep up. Letters are multi-dimensional objects in their minds that rotate and roll around. It's hard to remember the correct direction of a multi-dimensional letter on a flat piece of paper.

One day, computers will be a part of every classroom. Then students like you, with strong right hemispheres, will be able to put to paper all of your thoughts, stories, poems and notes to lectures without the frustration of handwriting. Why is the computer so important to your success? Because typing requires both hands to work together. This means both hemispheres of the brain are working together. If "two heads are better than one," wouldn't you agree that using both hemispheres, particularly your stronger right hemisphere, is better than one? (Swimming, martial arts and any type of physical activity that requires you to "crossover" to the other side of your body are other great ways to use both hemispheres of your brain.)

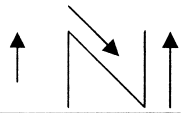
The speed of typing, over writing by hand, allows your mental images to flow without interruption, and you don't have to stop and think about forming the letters. The keyboard doesn't care if you are left- or right-handed—you need both hands, equally. Also, if you can flip and rotate letters in your mind, the letters p, b, d and q are all the exact same shape in different positions. But on a keyboard, the letters are in their capital form so a Q looks nothing like a P, or a B, or a D, no matter how you twist and rotate that letter.

There are lots of keyboarding programs available. My kids have used and enjoyed JumpStart®, Type 2 Learn®, Mavis Beacon® and Typing Tutor® (platinum and gold editions). I've even seen keyboards made for young students with smaller hands. You will be using computers all your life, so why not learn how to use them now? Learning to type on a keyboard may be the best way of completing your homework assignments quickly and getting all your thoughts down on paper. You can gain typing speed by Instant Messaging with a friend. Once you type 30 words a minute, you'll be amazed at how much faster and easier it is to get your work done.

If keyboarding is not an option for you, then you should learn handwriting as a form of art. Buy yourself a calligraphy pen and learn how to slowly write beautiful letters. When you see the art in writing by hand, it may become a joy to create rather than a chore. Slowly switch from special calligraphy pens to standard pens and pencils—but don't rush yourself! Take the time to enjoy your new art. Writing should not be a rushed event. In fact, prior to the invention of the ball point pen, writing had to be a slow process or the writer would spill an ink bottle and have ink all over the page!

Here are a couple of other tricks Matt taught himself to help improve his handwriting:

- Hold the pen or pencil however it is most comfortable for you. Matt writes using three fingers, not two.
- Start your letters on the line, not in space. In school we're taught to begin nearly every letter in some random area in space, rather than fixed on the line. But starting from the line and working up or out, helps some kids improve the readability of their letters. So, a capital N would start on the line, and follow the arrows:



Some visual-spatials find it easier to learn cursive than manuscript. Maybe it's because the letters flow together and, because they're connected, they can be written faster. If you must handwrite and your penmanship could use some improvement, I hope you'll try creating your own methods for writing your letters and see what works best for you.

Try your own method here:



## Chapter Six

### Start Acing Those Spelling Tests

When I give presentations to parents, I have a Peanuts® cartoon I use that shows Charlie Brown in bed thinking, "Sometimes I lie awake at night and wonder, 'What is the meaning of life?' Then a voice comes to me that says, 'I before E, except after C.'" Have you heard this spelling rule, "*I before E, except after C or when followed by G?*" Poor Matt spent a lot of time memorizing this rule. Then he misspelled "species" on his test because he kept spelling it, "speceis." (He did follow the rule, though, right?) Who makes up these crazy spelling rules, anyway? There are so many words that are spelled with rules that are broken or that make no sense—it seems silly to have the rule in the first place!

Do you have trouble with spelling? Lots of visual-spatial learners do. I'll bet your gift is being able to create great stories. The visual-spatial kids I've known can make up a story right on the spot. Their tales usually have lots of action and details about exactly what the scenes and people look like. Does it seem like having to write the story—and spell all the words right—takes all the fun out of making the story up? Don't worry, you're not alone. But this chapter will help you stay excited about making up stories **and** spelling the words right!

Spell checkers on word processing programs have helped lots of people write with fewer spelling errors, but they don't catch homonyms (words that sound alike but are spelled differently, like "hare" and "hair"). Sometimes spell checkers don't catch if the grammar you've written is wrong, either. So, while spell checkers are a very helpful invention, you're going to have to rely on yourself and a good dictionary to spell correctly. You can also rely on a good proofreader which even professional writers use!

Like everything else you learn, in order to remember your spelling words, you have to create permanent mental images of them. Without those pictures to see in your mind's eye, you'll be trying to memorize all the spelling rules and all the times they are broken. So, how are you going to create pictures of your spelling words?

First, try drawing a picture that includes all the letters of your word. You can make up a story to go with it, if you like. Here's Matt's illustration for the word, "Mountain," again. (This is in Chapter 3 on Reading.) You can actually see mountains in the letters "M" and "N."



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The characters in Matt's story were climbing a mountain and Matt made up a story about why the "a" had to come before the "i" because that was something he kept forgetting to do when he spelled it. His story went that first you have to slide down the mountain, then use a pick (which he turned the I into) to climb back up.

Whichever part of a spelling word is giving you trouble, take a blank, white piece of paper and write your word on it. Use a colored marker and write the part that you keep forgetting, (in our word, the "ai") really big:

Mount**ai**n



In order for the right hemisphere of your brain to remember an image, you should add color, size or humor to everything you learn. This will help you keep it stored in your memory. If you really have a mental image of your spelling word, you'll be able to see it well enough to spell it forward and backward. Try spelling your words backward to test whether or not you are ready for your next spelling test.

Sometimes writing the letters of the word on stairs will help you to see each letter more clearly. You can climb up the stairs in your mind to spell it backward and climb down the stairs to spell it forward!

M  
O  
U  
N  
T  
A  
I  
N

Or, as a mum in New Zealand recommended to me, try typing each spelling word you have on your computer in a different font. Pick a font that matches the feeling or mood of your word. So, serendipitous which sounds like a fun and interesting word, might look like this: *SERENDIPITOUS*. And, you might choose these fonts for these types of words: *frightening* *Elegance* – just be sure to use a font you can read!

Here's another tip. Sam used to have the hardest time remembering how to spell "friend," so he made up this silly story and now he never forgets:

### **Friend**

"These FRiEs from FRIday's sure taste good  
at the day's end!"

"You're right, FRlend!"

By using a silly rhyme and a double meaning on the letter combination "FRI," he used a trick that got his right hemisphere involved in remembering how to spell this word.

Sam and Matt once had a teacher who taught her students to actually put "rule-breaking" spelling words in jail, behind bars. The word was thrown in prison for breaking the rules and the image of the word behind bars would stick in the students' memories. Here's one Matt did for the word "reign" because the "ei" combination makes a long "a" sound. It breaks another rule by having a silent "g" in it.



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Here are some more tips to help you create mental pictures of your spelling words:

## **A Visualization Approach to Spelling\***

\*Borrowed from Neurolinguistic Programming

1. Write the spelling word in large print with bright-colored ink on a white piece of paper with the difficult part of the word written in a different color.
2. Hold the card in front of you as far as your arm can reach, a little bit above your eyes.
3. Study the word carefully, then close your eyes and see if you can picture the word.
4. Now, do something wild and crazy to the word in your imagination—the sillier the better. (You could make it colorful, have the letters act like people or animals—anything that will help you remember how the word is spelled.)
5. Place the word somewhere in space, in front of you or above your head. Remember that there is an infinite amount of space around you that can hold an equally infinite number of words.
6. Spell your word backward with your eyes closed. Was there an even rhythm between the letters? Good! That means you are really looking at your picture.
7. Now spell your word forward with your eyes closed.
8. Open your eyes and write the word **once**.
9. Close your eyes again and see if your word is still where you placed it in space. It will stay there forever!

What words are you having trouble spelling? Write them on the bottom of this page, then try some of the tricks from this chapter on a separate piece of paper.

It is not unusual for visual-spatial learners to have difficulty with spelling, so I want you to consider this. See if you

can read the following paragraph. Don't try very hard, just quickly read the words:

Aoccdrnig to rscheearch at Cmabrigde Uinervtisy, it  
deson't mtttaer waht oredr ltteers in a wrod apear,  
the olny iprmoatnt tihng is taht the frist and lsat ltter  
be in the rghit pclae. The oethr ltteers can be a  
cmolpete mses and you can sitll raed the wrod!

Apaprnelty, the huamn mnid deos not raed ervey  
lteter, but raeds the wrod as a wlohe. Ins't taht  
amzanig? So mcuh for the ipmorante of spleling!

You might show your teacher this the next time you have  
difficulty with a spelling test!

## Chapter Seven

### Taking Notes in Pictures

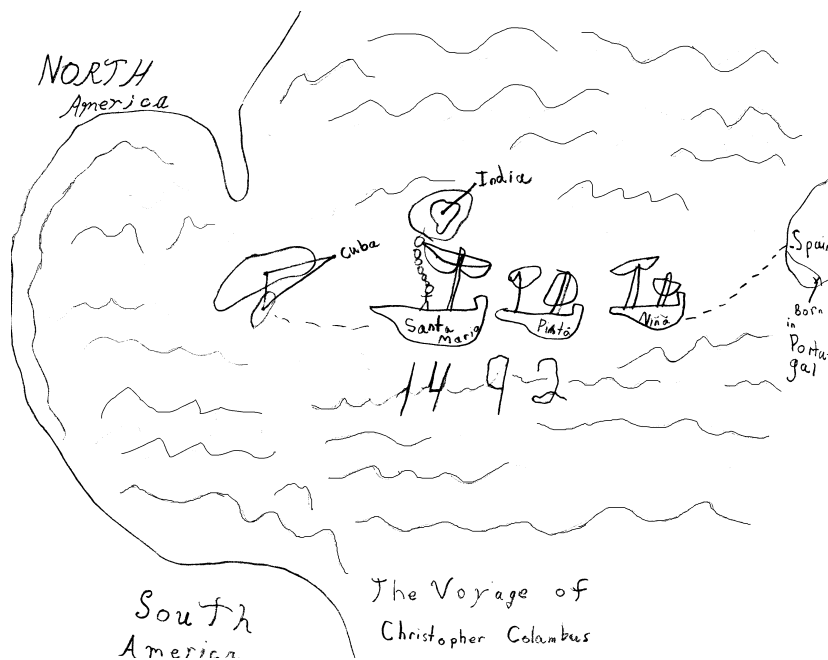
I mentioned in Chapter 4 that you should take your notes in pictures. A couple of years ago, Matt was taking a World History class and one day, there was a guest teacher who had been in World War II. As the gentleman was giving his lecture (an oral presentation only, with no maps, pictures or other images), he stood over Matt and noticed that Matt was drawing in his notebook. He held the notebook up for the entire class to see and said, "I hope the rest of you are paying more attention than this young man." Matt was horribly embarrassed.

After class, Matt approached the guest teacher and explained that his "drawings" were how he took notes. He asked the gentleman to quiz him on any of the material. The guest teacher did and Matt answered all the questions correctly. Matt had drawn the outlines of the countries the man had visited. He had drawn the weapons the man had used from the descriptions he gave and included the years the man had mentioned as though they were engraved on the weapon. Matt remembered all of the important material because he had created pictures of the details, both in his notebook and in his mind. The guest teacher apologized to the class the next day. He said, "I didn't realize you could take notes in pictures." That teacher now has a better understanding of the best way for visual-spatial learners to take "notes." By the way, in Chapter 13 I'll talk about *self-advocacy*, or speaking up for yourself the way Matt did.

You can use this technique, of taking notes in picture form, while you are listening to a lecture or if you need notes on what you are researching from a book, a TV show or the Internet. Whatever source you are learning new material from, that material can be remembered by drawing pictures. Drawing will help that material become permanent in your

mind because you can "download" those pictures whenever you need them.

If you have a hard time staying awake during lectures that don't have visuals, understand that **only you** are responsible for keeping the right hemisphere of your brain awake! Do whatever it takes to keep that part of your brain in the game so you can learn from what you are hearing. Try taking your notes in pictures. You can make the pictures silly, funny, even cartoon-like. You don't have to be a good artist. You just have to remember what you are learning. Make sure you are listening for important details like dates, names and places and include those in your drawings. You can use names to decorate boats as in this example Matt drew for me about what he had learned about Christopher Columbus' voyage:



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Notice that his drawing includes the names of the ships, the year they sailed, where they sailed from and where they thought they had landed (India). You can take notes in picture format, for nearly any subject. If you don't draw well, use stick figures, use quick strokes of your pen or pencil—this is note taking, not fine art!

If you can't draw fast enough while you are in class, ask your teacher if you can tape record the lecture. That way, you can do your drawings later, when you can replay the tape and stop it as needed. If you are given permission to tape, though, don't use that as an excuse to zone out during class! You still have to be an active participant or you'll lose the recording privilege! Some visual-spatial learners remember the teachers' facial expressions and where they were standing when they discussed certain topics. So watching the teacher can sometimes work better than taking notes, when your head must be down, looking at your paper.

If taking your notes in pictures is too time consuming and your teacher will not allow you to record the lectures, you can try a modified version of picture-note taking by doing a mix of drawing and words. When I was in high school, I had a teacher who lectured to us at lightning speed. We were expected to write down every word he said. We never knew what tiny detail would be on a pop quiz and we never knew when the quiz would be given. I taught myself to use symbols in place of words. For example, the symbol  $\Delta$  means "change." The symbol  $<$  means "less than," and  $>$  means "more than." This symbol, @, means "at" but is quicker to write. The Greek Letter Sigma, shown as  $\Sigma$ , means "sum." These are commonly used symbols, but you can make up your own. I used  $\uparrow$  to mean something was increasing or growing, and  $\downarrow$  to mean something was being taken away or becoming smaller. I used  $\leftrightarrow$  to write about two columns of things that were equal or characters of a story who had the same traits, or anything else that I needed to know were related somehow (you could also use the = sign!). This symbol,  $\Omega$ , is Omega, the last letter in the Greek alphabet. I used it whenever something was ending or if a character died. A capital "A" is the Greek symbol for Alpha, or the beginning, and could be used to write about the start of something new or a birth or the introduction of a new character. You could use "B4" for the word, "before," or "oppty" for "opportunity."

I'll bet you can think of lots of abbreviations and then start using them in your note taking.

I've used "VSLs" throughout this book to stand for visual-spatial learners. Many people say "TV" for television. If you use Instant Messaging, you already know lots of acronyms that are used to type secret messages your parents don't know about (or so you think!). Acronyms are also used to keep the sender from having to type every word. Some of these include, "PLOS" for Parents Looking Over Shoulder and "LOL" for Laughing Out Loud. You could create your own acronyms in your note taking. Depending on the subject you are taking notes for, there are probably lots of repeated phrases that you could substitute with an acronym. Just be sure your acronym is something you'll remember!

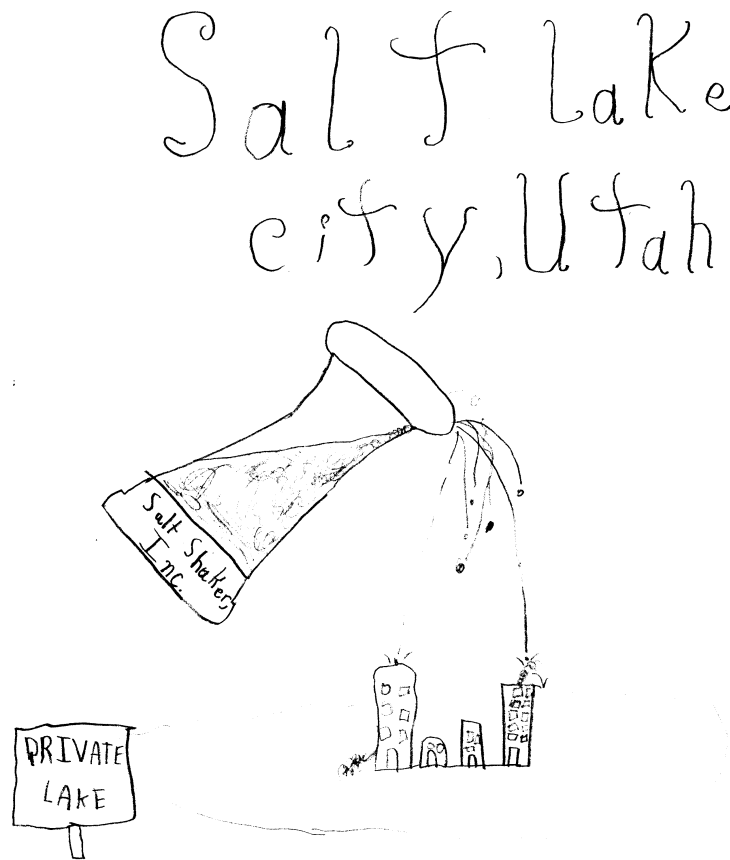
Why don't you try creating your own list of symbols and acronyms below? Here are some more examples to get you started:

<u>Word</u>	<u>Shortcut</u>
with	w/
between	b/w
double	2x
triple	3x
On the other hand	OTOH
By the way	BTW
In the first place	1 <sup>st</sup> pl

Shorthand was a skill many women were taught in the early and mid-1900s so that they could become good secretaries and be able to write exactly what someone was saying, as fast as the words were spoken. I don't know shorthand, but if you can find someone who does, you might find even more symbols and shortcuts you can use in your note taking.



Taking notes in pictures works well for information you have to research or memorize. For example, let's suppose you are studying the capitals of each state in the U.S. and you learn that Salt Lake City is the capital of Utah. Ok, these are easy ones to create pictures for, but you get the point! Here's what Matt came up with for me:



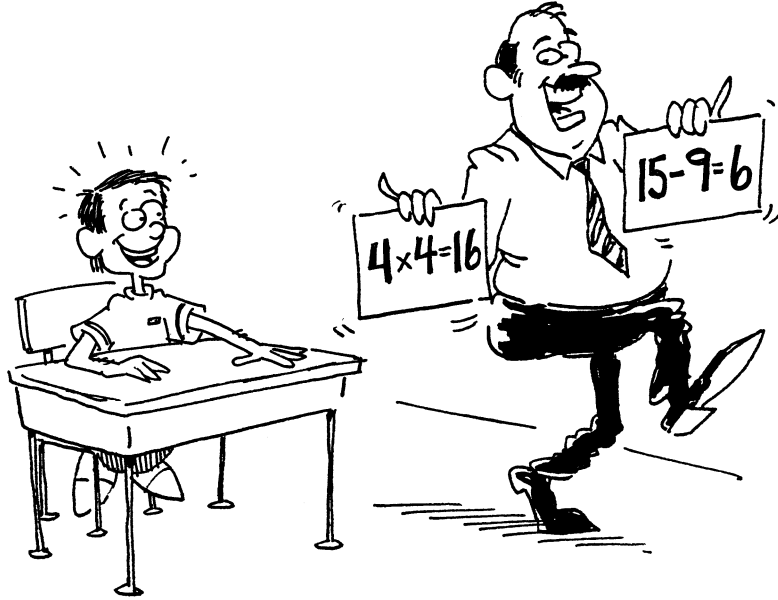
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Because he created his own drawing and he used humor, he is more likely to remember this capital than trying to just memorize it. You can do the same thing! Do you need to memorize something? Try drawing it!



## Chapter Eight

### Memorizing Your Math Facts



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Let's face it, memorizing the times tables is not fun. What's the point, right? Nearly every adult uses a calculator and that will certainly be true for you, too. But achievement tests in almost every state in America insist that you be able to rattle off all of the times tables and do it very quickly. If you'll use the methods I teach you in this chapter, you'll get those math facts locked into the right hemisphere of your brain. You'll be able to give the correct answer every time you need them. Ready?

OK, here's the math grid of all the facts you've probably been asked to memorize.

Make a copy of the graph on the next page to use with this chapter:

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0													
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

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The grid is pretty big, huh? There are 169 facts in there. How on earth are you going to memorize 169 facts? As a visual-spatial learner, you're looking at the big picture, the entire grid. If you don't know many of your facts already, you're probably beginning to panic-169 facts is a lot of facts. We're going to have to break this down into parts for you to see just how incredibly easy this is, ok?

Do you have a copy of page 52? You'll need it so you can start filling it in. Now, what are the facts you know right from the start. Probably the 0s, the 10s, and the 1s, right? Let's fill those in. Your grid should look like this when you're done:

<b>x</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>0</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>1</b>	0	1	2	3	4	5	6	7	8	9	10	11	12
<b>2</b>	0	2									20		
<b>3</b>	0	3									30		
<b>4</b>	0	4									40		
<b>5</b>	0	5									50		
<b>6</b>	0	6									60		
<b>7</b>	0	7									70		
<b>8</b>	0	8									80		
<b>9</b>	0	9									90		
<b>10</b>	0	10	20	30	40	50	60	70	80	90	100	110	120
<b>11</b>	0	11									110		
<b>12</b>	0	12									120		

Now take a piece of paper and lay it diagonally across your grid so that only the upper right half of it is showing. It should look like this:

x	0	1	2	3	4	5	6	7	8	9	10	11	12
	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	2	3	4	5	6	7	8	9	10	11	12
											20		
											30		
											40		
											50		
											60		
											70		
											80		
											90		
											100	110	120

I want you to notice that every number on the half of your grid that is showing has a matching number in the half that is covered. This is called the commutative principle. In algebra, it is shown as  $a \times b = b \times a$ . Or,  $10 \times 3$  is the same as  $3 \times 10$ , right? So now your grid just got a whole lot smaller! You only have to learn half of it!

I think the next easiest number to multiply by is probably the 11s. They're just like the ones, only in double-digit form, right? Fill in the rows for your 11s, up to  $11 \times 10$ , on your grid. We'll work on  $11 \times 11$  and  $11 \times 12$  later.

Do you know how to skip count? Most kids I've worked with can skip count by 2s and by 5s. If you don't know how to skip by 5s, just remember that every answer for the 5s must end in either 5 or 0. There's a pattern to it, which your

right hemisphere will love! The answers are: 0, 5, 10, 15, 20, 25, 30, 35, etc. See how every answer ends in a 5 or 0? Or, you can use this great trick that Sam thought up:

Whenever you multiply by 5, take the number you are multiplying by and divide it in half, then move the decimal point over one digit to the right. So,  $5 \times 4$  would be half of 4, or 2, move the decimal and you have 20! In the equation  $5 \times 7$ , half of 7 is 3.5, move the decimal, and you have 35.

Here's the grid with the 11s, 2s and 5s filled in:

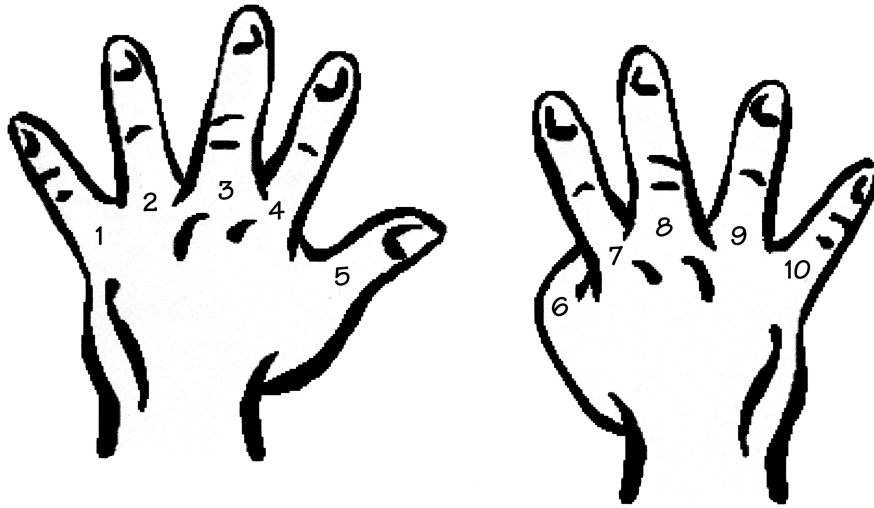
<b>X</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>0</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>1</b>	0	1	2	3	4	5	6	7	8	9	10	11	12
<b>2</b>	0	2	4	6	8	10	12	14	16	18	20	22	24
<b>3</b>	0	3	6			15					30	33	
<b>4</b>	0	4	8			20					40	44	
<b>5</b>	0	5	10	15	20	25	30	35	40	45	50	55	60
<b>6</b>	0	6	12			30					60	66	
<b>7</b>	0	7	14			35					70	77	
<b>8</b>	0	8	16			40					80	88	
<b>9</b>	0	9	18			45					90	99	
<b>10</b>	0	10	20	30	40	50	60	70	80	90	100	110	120
<b>11</b>	0	11	22	33	44	55	66	77	88	99	110		
<b>12</b>	0	12	24			60					120		

You are really filling up this grid! There are a lot more squares completed than empty and the empty ones are going to be a breeze.

I think the next easiest number to multiply by is the 9s. There are so many tricks for remembering the 9s times tables, you can pick your favorite! First, there's the "finger

method." What you do is assign each of your fingers a number, just like in the picture below.

### Finger Method of Multiplying by Nines



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In this example, the equation would be asking  $6 \times 9$ , right? Because the finger assigned to be number 6 is folded down. See how that leaves five fingers up on your left (for your tens digit) and four fingers up on the right? (Those are your ones or, "units!") The answer, then, is 54! Try it, it works! How would you solve  $7 \times 9$ ? Start by putting the finger that represents "7" down. How many fingers to the left are still up? That's your tens digit. How many fingers are up to the right of that finger? That's your ones digit. Did you get 63? Try this with all the nines. It's fun!

If you don't like the finger method, you can look for patterns. Your right hemisphere loves looking at patterns and the 9s have great patterns to discover. First, there's the fact that for every multiple of 9, the digit in the tens column increases by one while the digit in the ones column decreases by one:



09
18
27
36
45
54
63
72
81
90

And, there's the pattern that no matter what you are multiplying 9 by, as long as it's between 1 and 9, the two digits of your answer will always add up to 9. For example, the answer to  $4 \times 9 = 36$ , the digits  $3 + 6 = 9$ . Also, the tens digit is always one less than what you are multiplying by 9. So, if your equation is  $4 \times 9$ , then your tens digit is automatically 3, right? Now what plus 3 would equal 9? That's your ones digit. Six, right? Then your answer is 36. Try this with the other multiples.

The last pattern I know of with the 9s is that all the possible answers have reverse answers. In other words, one possible answer is 09, another is 90, one is 18, and another is 81. Do you see the pattern?

09  
 18  
 27  
 36  
 45  
 54  
 63  
 72  
 81  
 90

Now, add all the answers for the 9s to your grid.

OK, let's tackle the 3s. See if you can purchase or borrow a copy from the library of the Schoolhouse Rock multiplication videos ([www.school-house-rock.com](http://www.school-house-rock.com), look for "Multiplication Rock"). These used to be commercials on American Saturday morning television in the 1970s. Now, you can get them on video or DVD. (There are even short cartoons for English grammar and, for you American students, there's American History.) The song they made up for memorizing the 3s is very catchy! You won't be able to get it out of your head! And, once it's in your head, you'll be able to skip count by 3 easily. If you can't get a hold of these videos, write the following numbers on a piece of blank white paper. Create your own rhythm for memorizing the order. It may help if you do this in sets of three (3, 6, 9 pause, 12, 15, 18, etc.) You can sing:

3 6 9            12 15 18            21 24 27            30

Notice there are three numbers in the ones category, three in the teens and three in the twenties? You can even sing the 3s to "*Jingle Bells*"! Try it like this:

"3, 6, 9    12, 15    18, 21    24, 27, 30 and you're done!"

If you can skip count, you can multiply. Just count on your fingers until you get to the multiple you need. So if you are multiplying  $4 \times 3$ , skip by threes on four fingers. Did you get to 12? Great! Now add the facts for the 3s to your grid.

Remember to treat the right hemisphere of your brain well. One of the things your right hemisphere loves is rhythm, that's why it enjoys music so much. Here are some easy facts to learn because of the rhythm in the equations:

$$5 \times 5 = 25$$

$$6 \times 6 = 36$$

$$6 \times 4 = 24$$

$$6 \times 8 = 48$$

You already had the  $5 \times 5$  one, but this just reinforces it. Try saying these rhyming equations as you jump on a trampoline! Once you have these facts down, add the answers to your grid.

Your right hemisphere also enjoys silliness and humor, so use these tricks to remember three more equations:

You have to be 16 to drive a 4 x 4. ( $16 = 4 \times 4$ , or  $4 \times 4 = 16$ )

5, 6, 7, 8 is what you remember for  $56 = 7 \times 8$  ( $7 \times 8 = 56$ )

1, 2, 3, 4 is what you remember for  $12 = 3 \times 4$  ( $3 \times 4 = 12$ )

Add these answers to the grid.

Fours are really easy if you just think of them as double the 2s. So, if you know that  $2 \times 3 = 6$ , then to find  $4 \times 3$ , just double your first answer, or  $2 \times 3 = 6$ , then double the 6 to get 12. This works because 4 is 2 doubled. So  $4 \times 3 = 12$ . Try this with the rest of the 4s. First, split the four in half so that you are multiplying by 2, then take your answer and double it. You can do the same thing with the 6s because a 6 is just double a 3. So, do the multiplication problem with a 3 and double your answer. This way,  $6 \times 3$  becomes  $3 \times 3$ , which equals 9, then double the answer ( $9 \times 2 = 18$ ), so  $6 \times 3 = 18$ . The grid is really filling up and you haven't even had to work very hard, yet, right?

The 11s were easy up until  $11 \times 10$ , don't you think? But what about  $11 \times 11$  and  $11 \times 12$ ? Do you see a pattern if you write the equations out like this:

$$11 \times 11$$

$$11 \times 12$$

1. Take the first digit from the first "11," that becomes the first digit of your answer: **1**.
2. Add the digits of the next number, which is either 11 or 12 and when added equals either 2 or 3, and that becomes the second digit of your answer. So far, you should have:

$$11 \times 11 = 12\_$$

$$11 \times 12 = 13\_$$

3. Take the last digit of the last number (1 or 2) and that becomes your third digit for your answer: 121 or 132! It works for both! (Now, fill those answers in on your grid!)

$$11 \times 11 = 121$$

$$11 \times 12 = 132$$

This will work for all the 11s from  $11 \times 11$  to  $11 \times 18$ . And nobody expects you to remember  $11 \times 18$ , do they?!

<b>X</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>0</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>1</b>	0	1	2	3	4	5	6	7	8	9	10	11	12
<b>2</b>	0	2	4	6	8	10	12	14	16	18	20	22	24
<b>3</b>	0	3	6	9	12	15	18	21	24	27	30	33	
<b>4</b>	0	4	8	12	16	20	24	28	32	36	40	44	
<b>5</b>	0	5	10	15	20	25	30	35	40	45	50	55	60
<b>6</b>	0	6	12	18	24	30	36	42	48	54	60	66	
<b>7</b>	0	7	14	21	28	35	42		56	63	70	77	
<b>8</b>	0	8	16	24	32	40	48	56		72	80	88	
<b>9</b>	0	9	18	27	36	45	54	63	72	81	90	99	
<b>10</b>	0	10	20	30	40	50	60	70	80	90	100	110	120
<b>11</b>	0	11	22	33	44	55	66	77	88	99	110	121	132
<b>12</b>	0	12	24			60					120	132	

OK, let's tackle the 12s. The 12s up to  $12 \times 9$ , are just the 2s plus 10 times the number you are multiplying by. So, if you're doing  $12 \times 4$ , first you do  $2 \times 4$  which equals 8, then you do  $10 \times 4$  (remember, the 10s are the easy ones) which equals 40. Last, you add your two answers,  $8 + 40 = 48$ . You already know  $12 \times 10$  and  $12 \times 11$  from doing them earlier.

Here's another way to remember the 12s. Do you see a pattern in all the possible answers for the 12s? Here they are:

00  
12  
24  
36  
48  
  
60  
72  
84  
96  
108  
  
120  
132  
144

If you look at the second digit of each possible answer, they follow a 0, 2, 4, 6, 8 pattern. Each time the pattern is complete (at "8"), the number in the ones digit skips a beat. Otherwise, the 1s just increase by one! So you have 1, 2, 3, 4, (skip), 6, 7, 8, 9, 10, (skip), 12, 13, 14. Using this method, you can learn  $12 \times 12$ , too! What do you think  $12 \times 13$  would be? It's not on your grid, but you should be able to figure it out by using the pattern above.

There are only two facts remaining:  $7 \times 7$  and  $8 \times 8$ ! There's an easy sports trick for  $7 \times 7$ . The 49ers are a professional football team in San Francisco. Below is a visual for how the players on a football team might be in position. See how there are seven players in a row? These are called the "linemen." While each team has 11 players on the field for every play, they only have seven linemen at a time. So,  $7 \times 7 = 49$ ers, or 49!

```

      X           X           X
          X
    X   X   X   X   X   X   X
  
```

Here's how you're going to remember the last equation,  $8 \times 8$ . Think of something you *really* like. It could be anything from your favorite animal to your favorite food, it doesn't matter. Let's say you really like dolphins. Now, to master the equation  $8 \times 8$ , I want you to take a blank piece of paper and draw eight dolphins, each with eight air bubbles above their heads (or whatever favorite animal you choose). Now, I want you to write at the top and bottom of your paper,  $8 \times 8 = 64$  really large and in color. Tape your picture on your mirror or above your bed, somewhere you can stare at it while you brush your teeth or get ready for bed. Make a permanent mental picture of your drawing, including the equation. You can replace the dolphins with anything else that interests you, just make sure you have eight of them with eight of something else by each one. It could be eight squirrels each with eight nuts-it doesn't matter!

The next night, do the same kind of drawing, using different animals or food, for any of the facts that didn't stick with the other methods. Just make sure you use different animals, or other things you care about, for each equation. You have

to use different things you **love**, though, because if you use dolphins again, or whatever you used for your first drawing, your pictures will get mixed up in your memory. How about ice cream cones, each with scoops of ice cream?

The only other rule for this drawing technique is to make sure you draw these pictures, don't use cutouts from a magazine or stickers or somebody else's drawings. If you draw it, you will remember it because you own it. And, just like with all the techniques in this book that require you to create something, remember to use color and large sizes of what you draw so that it's even easier for you to remember.

If you try these tips for learning your times tables but you still have trouble remembering them, you might try a book called, ***Memorize in Minutes: The Multiplication Table***. It's available from [www.multiplication.com](http://www.multiplication.com). The author has taken each number and assigned a rhyming word to replace it. So a four becomes a "door," and a two becomes a "shoe," and so on. Then, cartoon stories were made up using these rhyming words in place of the numbers. For example, in one story, a queen becomes dizzy and ill after wearing a skate (eight) on one foot and a shoe (two) on the other. In the end, she is a sick queen (which rhymes with 16) because  $8 \times 2 = 16$ .

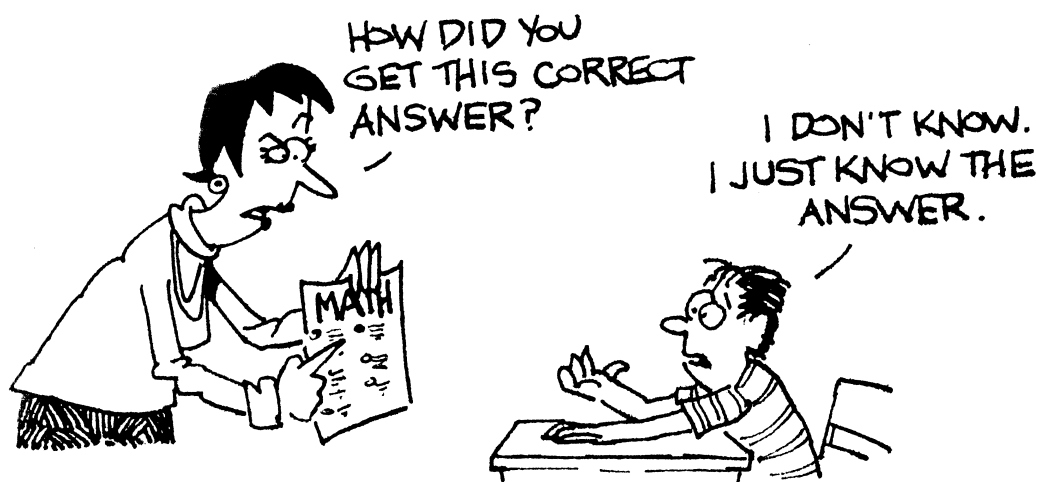
There's another book to help memorize your math facts called, ***Times Tables the Fun Way***. It's available at [www.citycreek.com](http://www.citycreek.com). They also sell cards for division facts, a book for addition and more cards for remembering your subtraction facts. Or, you could create your own stories for all your math facts. Just be sure to use original ideas that are funny, then use color and size to make them easy to remember.

### **Division is just the reverse!**

So what about division? For a lot of the simple division problems (as opposed to long division problems), if you really have a picture of the multiplication fact, you'll be able to see the answer right away. For example, when you learned that you have to be 16 to drive a 4 x 4, you created a picture of

the equation  $4 \times 4 = 16$ . So, if you were asked  $16 / 4 = ?$ , you should be able to see the missing number from your picture. Or, if you used rhythm to memorize your fact, you should be able to fill in the blank for the division problem. When you learned  $6 \times 6 = 36$ , the picture of that rhyming equation should be clear to you when you are asked  $36 / 6 = ?$  What about the equations that you drew pictures for? If you really do have that picture in your memory, you'll be able to see which number is missing when you are asked the division problem.

### **Long division - showing your work**



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Some visual-spatial kids I know can look at a long division problem and just see the answer. They cannot tell me how they know, they just know. They cannot tell me how they got their answer, they just got it. Can you do that? Can you show the steps of how you got your solution? If you don't see the answer, are you able to solve the problem and show your work? "Show your work," doesn't have to mean, "complete the problem exactly as a sequential learner would." It means showing the steps so that you can teach a sequential learner how you solved the problem. It means being able to show enough work that somebody else could follow your steps and solve the problem, too.



Lots of VSLs I've worked with make up their own methods for doing long division problems. There's nothing wrong with that as long as you always come up with the right answer. Once you've come up with your method, check it out with several different equations. Double check your answer with a calculator. Now, imagine that you've got to be able to justify your answer. Your assignment isn't to arrive at a correct answer—it's to teach someone else, someone who doesn't think like you do, exactly how you got your answer. Can you work backward from your answer to show your steps? This works for some VSLs. Think about how you can solve the problem, using your methods, but showing enough steps so someone else can recreate it. It's very much like a crime scene. You've got the victim, you've got the weapon. Now, piece it all together and figure out the who-done-it!

For example, in the long division problem below, let's suppose that using whatever method you have created, you arrive at a solution and are able to prove it is correct by double-checking the answer with a calculator.

$$\begin{array}{r} 26 \\ 15 \overline{) 390} \end{array}$$

Now that you know the answer, work through the problem backwards to show the steps. Remember, your real assignment is to teach someone who doesn't think in pictures like you do, but who thinks from one step to the next, in words. So the first "work" to show is  $15 \times 2$ . This answer is then written directly under the 39:

$$\begin{array}{r} 26 \\ 15 \overline{) 390} \\ \underline{30} \end{array}$$

Next, you have to remember that sequential learners can't just hold numbers in their heads as easily as visual-spatials do, so the next "work" to show is to subtract the 30 from 39, which equals 9, then bring down the next digit, the 0:

$$\begin{array}{r} 26 \\ 15 \overline{) 390} \\ \underline{30} \\ 90 \end{array}$$

You don't need to figure out how many times 15 goes into 90, because you already knew that! It must be 6. But the sequential thinker will need to be shown, so just write out the last bit of work:

$$\begin{array}{r} 26 \\ 15 \overline{) 390} \\ \underline{30} \\ 90 \\ \underline{90} \\ 0 \end{array}$$

While it may seem obvious to you, the last number showing in any problem like this must be 0. If it isn't 0, you're not done. Remember, you have to show the work so that somebody else can follow your steps and get the same answer you did.

By working backward through problems, in math and other areas (creating an outline of a report after the report is written qualifies as working backwards!), you can show your steps so that others can understand exactly how you got your answers.

If you have trouble keeping your numbers lined up correctly when you're doing division, try turning your lined paper sideways so you have columns to place your numbers in. Or, you can use graph paper to help keep them straight.

### **Using math manipulatives**

There are lots of great products for "seeing" how math works and they're not just limited to younger grades, either. If you're having trouble learning a particular math concept, ask your teacher if the school has manipulatives you can use so you can **see** the math. Once you have a picture of how math works, you'll learn it can be a really fun subject. The problem comes when students aren't given a chance to use something hands-on to watch how an equation comes together. But just wait for geometry—you're gonna love it!

Cuisenaire rods (available from [www.etacuisenaire.com](http://www.etacuisenaire.com) and most teacher supply stores) can be used to see math problems from simple addition and subtraction through algebraic equations.

If you're a homeschooler, or your parents can buy this for you in addition to the math text you are using, try Math-U-See™. There's even a video to go along with the manipulatives. When you can see fractions being added together or subtracted from each other, it makes working with them much easier.

Borenson and Associates produce a great manipulative for understanding algebra. It's called *Hands-On Equations*. You use a balance to shift parts of an equation to one side or another and then solve for a solution, or "x." By maintaining balance, literally, you can see how algebra works.

No matter what material you are working on, try to find or create your own visuals to reinforce what you are being taught. Creating permanent images in your brain will help you do well on tests because you'll be able to see the answers as pictures in your mind.

## Chapter Nine

### Using Your Visual-Spatial Strengths to Memorize New Material

I talk to a lot of teachers about how they can best teach to the visual-spatial learners in their classes. There are probably lots of students in your classroom who learn the same way you do. Many teachers tell me that they try to use helpful, visual methods so their students can learn and remember new material. But, there are things you can do to help yourself, as well. Here are some examples:

Take the information you must memorize and create a silly story with it. I once met a very animated conference presenter named Jon Pearson ([www.createlearning.com](http://www.createlearning.com)). Jon taught the 13 colonies in less than five minutes by having his audience memorize a ridiculous story—in pictures that everyone created in their minds—of a Jersey cow named Georgia, on top of the Empire State Building. Can you "see" **New Jersey**, **Georgia** and **New York** in this story? The tale went on to include all 13 original American colonies. After each line we repeated, we were told to create an image in our mind's eye and to make it as big, colorful and silly as we could:

There's a cow named **Georgia**

(Georgia)

It's a **Jersey** cow

(New Jersey)

She's sitting on top of the **Empire State**  
Building (New York)

She's singing a couple of Christmas **carols**  
(North and South Carolina)

Under her arm is a **Virginia ham**  
(Virginia and New Hampshire)

The cow is wearing a pair of yellow **underwear**  
(Rhymes with Delaware)

In its hoof is a **pencil**

(Pennsylvania)

The cow is making a **Connect**-the-dots drawing

(Connecticut)

Of **Marilyn** Monroe

(Maryland)

Walking down a **road**

(Rhode Island)

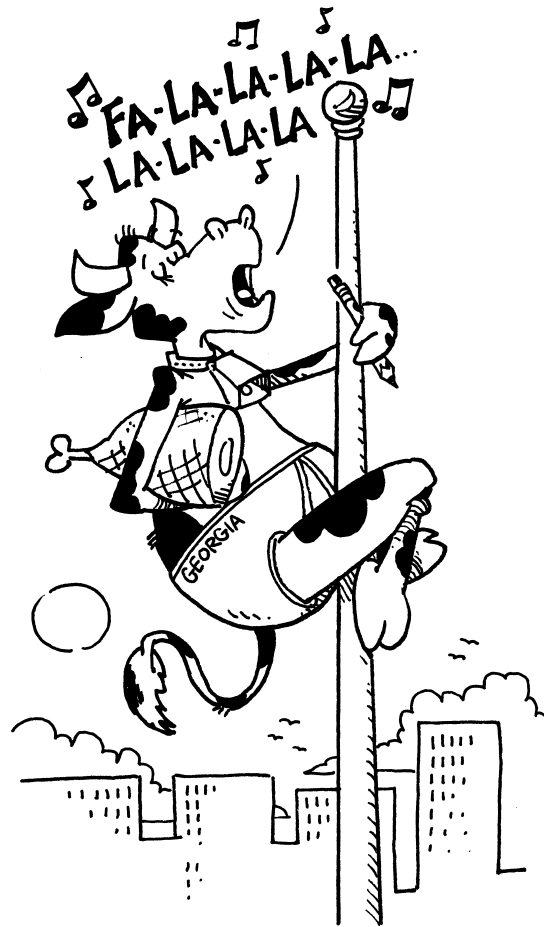
Going to **mass**

(Massachusetts)

When Jon was done, every member of the audience could remember the ridiculous image we had mentally created of a cow on top of the Empire State Building. By doing that, we had remembered all 13 colonies. I have used this example in Canada, New Zealand and Australia to prove the point that anyone can memorize new material, even if it is completely irrelevant to them (why would anyone in Canada or Down Under care about American colonies?).

The best part is that you don't have to be an artist to do this. If you want your images drawn, not just imagined, stick figures work just fine. As long as your story is silly and funny and you use color, exaggerated sizes and humor to remember it, the material will create a lasting image in your mind. You can use this trick to remember so many different types of material, from historical facts to science principles and so much more.

Why do you suppose beginning piano students are taught the notes of the scale as *Every Good Boy Does Fine*? (EGBDF)



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Because it works to stick in the student's mind. Have you seen this trick for memorizing the Great Lakes?

H    Huron  
O    Ontario  
M    Michigan  
E    Erie  
S    Superior

The first letter of each of the lakes spells out the word, "homes" when you read them vertically, going down. In Canada, they learn this in geographic order as:

Super (Superior)  
Man (Michigan)  
Helps (Huron)  
Every (Erie)  
One (Ontario)

Use acronyms as a way to memorize new material, especially if you can make them silly. Sam had to memorize this information for his science class:

**D**omain  
**K**ingdom  
**P**hylum  
**C**lass  
**O**der  
**F**amily  
**G**enus  
**S**pecies

So he created this "headline" to remember the order:

**D**arwin **K**racks **P**orpoise **C**ode **O**rders  
**F**amilies to **G**roup **S**pecialist

It's meaningless and ridiculous, which makes it memorable! Try this technique the next time you have a string of material you have to memorize.

How do you suppose three-year-old children manage to learn 26 bits of completely irrelevant information (the alphabet), in order? By putting them to music! I can't imagine why such a young child would find interest in the order of the letters, but the ability to remember all of them is easy because we're taught to sing them to the tune of *Twinkle, Twinkle Little Star*. Catchy tunes make new information easy to remember and permanent.

A friend of mine wrote me with this:

I took an exhausting/exhilarating 16-hour reflexology certification course this past weekend. I was told that memorizing the official 47-word definition of reflexology—exactly, word for word, was worth 15 points on the Certification exam. First I thought, I can never do this. Then, I decided I would make a song out of it!! I put it to a familiar tune! THAT came from YOU!! (Personal communication, E. Meckstroth, October, 2004.)

Take a familiar song, especially a nursery rhyme like *Three Blind Mice*, *Twinkle, Twinkle Little Star*, or even *Happy Birthday*, and put the information you are trying to memorize into it. Because the right hemisphere of your brain enjoys music, humor and rhythm, you'll have a better chance of remembering new information if you do something silly with it. Try it—you may be surprised at the results!

Another trick you can use to remember information that has related pieces is to create a game of the material. This works great for memorizing capitals of states, countries of continents, specific animals of a species, or any other material that includes two groups of information that are related to each other. Matching games like "Concentration" (some people call it "Memory") don't take long to make yourself. Plus, they're fun to play! Just take some blank white



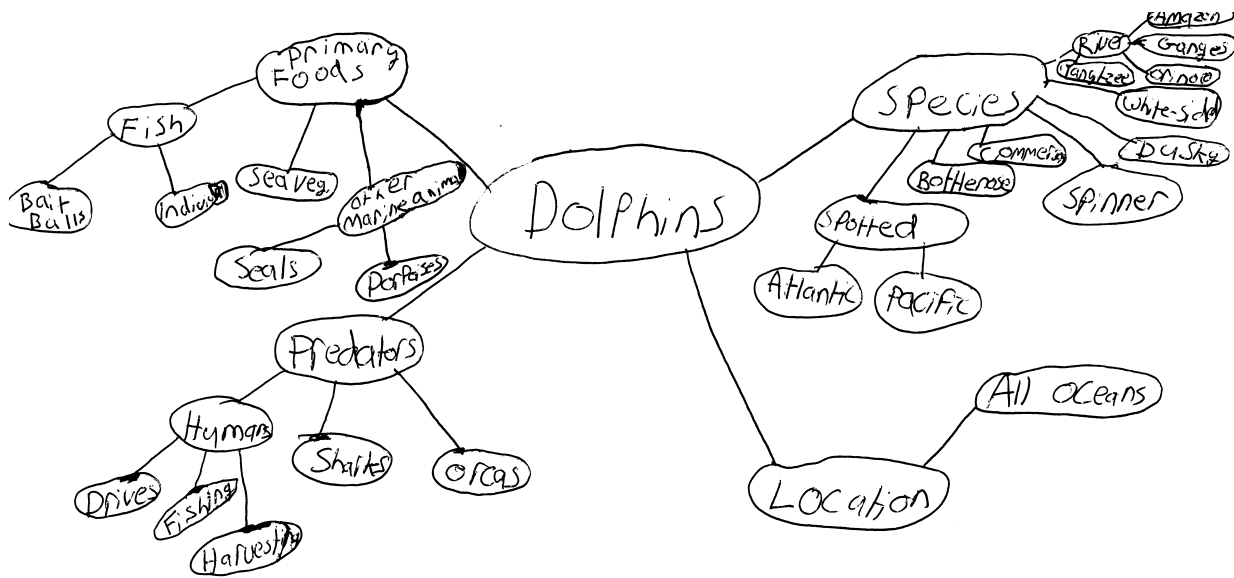
index cards for recording your information. You can make each note card with words or drawings, whatever works best for you. Let's suppose you are trying to memorize the state capitals. Make a card for every state. You might use an outline of the state with the name included somewhere on or above the outline of it. Then, make a card for every capital. You can make up silly stories if that helps remember the names of the capitals. Remember the drawing Matt did for Salt Lake City, Utah on page 49? Do the same thing to remember as many capitals and states as you can.

You can also use color to help you remember which capitals go with which states. Just include color in your drawing or put a dot of color somewhere on the state card and the same color dot on the card that matching capital card. This will be a good way to make sure your answers are correct while you play the game, too.

Once you have created all of your cards, lay them face down and play the traditional game of Concentration where you match capital to state. (You'll probably want to start with just five or seven states and their capitals and gradually increase the number.) You'll need to lay out (upside down) several cards with capitals, then several cards with states. Turn two cards over, if you've matched a state and its capital, you collect the cards. If you didn't get a match, turn them back over and start again. But, try to remember what information is on those cards! You will need them later. Get a friend, sibling or parent to play with you and test your knowledge. What are you learning right now? Can you make a Concentration or Memory game to help you?

Here's one more idea to help you memorize new information. In Chapter 4, I told you about creating webs of your information to organize your thoughts and notes before you write reports. You can use webbing to help you remember new material, too. For example, let's say that for your science class, you have been studying dolphins. You are going to create a report and then give an oral presentation on everything you have studied. You'll need to remember certain

species, what they eat, where they live and what predators they face. Your webbing, or notes, might look something like what Sam did for me:



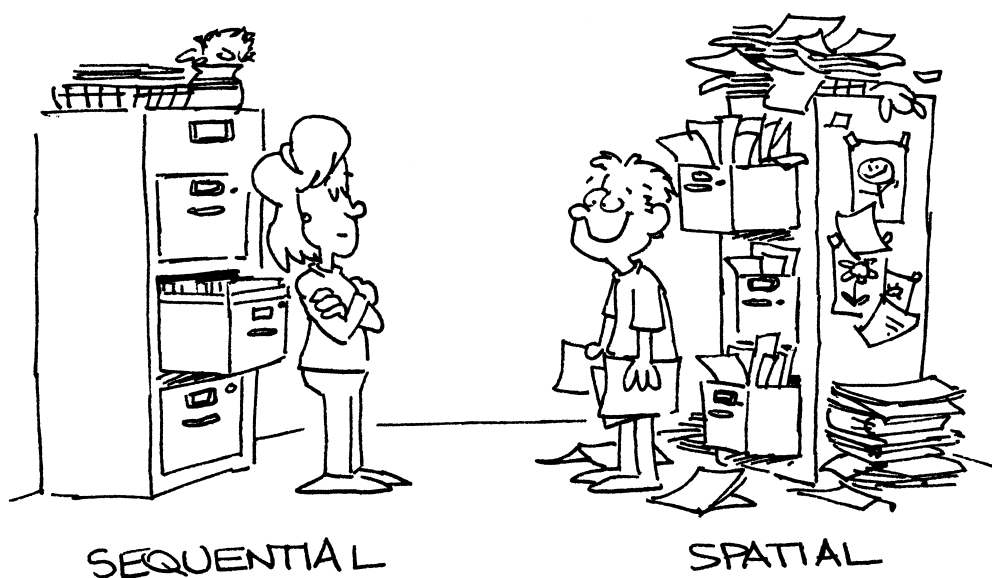
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When you create a web that shows how the information is connected, you will have made a permanent mental picture of all the facts about your subject. You don't have to spend a lot of time memorizing your notes, you just have to remember the pictures you created. Try it!

## Chapter Ten

### Organizational Skills

Most, if not all, visual-spatial learners are accused of being hopelessly unorganized. But it has been my experience that many VSLs can find a needle in a haystack. My son never ceases to amaze me in his ability to locate just the perfect LEGO™ piece he was searching for even though his room may look as though a tornado has hit it.



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It is important to note in the illustration above that, as long as each person is able to find exactly what he or she needs, in a reasonable amount of time, then neither one's organization is better than the other's. This is an area where, "to each his own," is the rule. If you organize like the person on the right and someone forced you to "organize" the way the person on the left has done, you would likely never find another document again. Your new system of organization would be completely foreign to you and you would not be able to imagine, or see, where your belongings were.

However, if you find that you are losing important paperwork (like homework!), or toys or money, you need to develop

a better system. The new method must be your own, though. It simply will not work to get organized under somebody else's (like a parent's) system. If your mom thinks green folders are what you should use for all your science work, but green is meaningless to you for remembering science, then you can't use that system. It won't work. You have to create your own strategies—ones that you can remember. Here's how to get started:

Visit office supply stores and other places that carry products designed to help with organization. Color-coded envelopes, files and pocket folders are perfect for storing specific papers. Colored index cards are great tools for note taking. A Day-Timer or Palm Pilot to record your due dates and appointments is an excellent way to remember when your assignments must be done. There's a reason why so many organizational products have come on the market in recent years. They must be the inventions of visual-spatials to help themselves and others who think and learn like they do.

Linda Leviton is a visual-spatial learner and a member of the Visual-Spatial Resource Access team. I asked her how she helps VSL kids get organized. Here's what she wrote:

VSLs are either horizontal or vertical organizers...if they are horizontal, they need a long table (preferably not deep) to put out (and leave out) works in process. If they are vertical, they need places to create stacks. I bought myself one of those paper sorters with cubbies and have it right next to my computer (with labels for each section) and that's how I do it.

(L. Leviton, personal communication, May 31, 2004)

When we homeschooled, each of my kids used a Teacher's Planner to record their daily assignments. In fact, sometimes homework from different subjects was recorded in different colors. There are lots of varieties of planners available, including ones that show a week-at-a-glance or a month-at-a-glance. You can find them at local teachers' supply

stores. Choose one that gives you plenty of room to write or draw your notes, especially due dates, assignment details and appointments.

Matt's personal method for making sure that he remembers to take his homework folder, lunchbox and water bottle to school every day is to pile them all up at his place on the kitchen table. Then, when he finishes breakfast, he takes it all to the car. The few times he has left some of those items somewhere other than the kitchen table, they didn't make it to school.

A large calendar for recording each family member's schedule is helpful. Use it to write down everyone's appointments from sports practices to work schedules, field trip days to long-term assignments, holidays and other days off. I've found that having my kids write a due date for assignments three to four days before the actual due date has helped avoid last minute all-nighters. The extra built-in time allows time for editing, revisions, etc, and a more relaxed approach to the deadline. Having a master calendar also allows you to see how long until Christmas, the last day of school, your birthday or other events you are anticipating.

Use the computer to get organized! There are a number of programs that include calendars and ways to notify you of your due dates. You can create files of notes about certain assignments and store them on your computer. You will likely be using a personal computer all the rest of your life. Start using software products now to help you organize your schoolwork and home life.

There are certain traps for visual-spatial kids that you should be aware of now. The traps are the computer and the television. Because the computer and TV use visual images, the right hemisphere is highly attracted to these entertainment boxes. Try to set aside a specific time during the day or week for computer and television use. If this is built into your schedule, it'll be easier to understand why mom is enforcing that your homework be done at a certain time and not

allowing you to procrastinate or be distracted by the TV or computer. We use a timer in our house so there's no argument about what time the computer game or TV show started. The timer is not arbitrary. The bell rings, the turn is over.

*"A place for everything and everything in its place"*—not an easy trick for visual-spatial kids, but one that will last you a lifetime. I seldom misplace my car keys because they go in the exact same place every time I come home. We have a small bookshelf set aside just for library books so when the due date comes, we're not scrambling to find them. Inexpensive containers, even shoeboxes and cleaned out plastic food tubs, make great sorting containers for small toys. We have an entire closet just for construction toys. In our home, we have only two rules about bedrooms: No food (yuck!) and there must always be a clear path from the door to the bed—I really hate stepping on LEGOs™ with bare feet! Otherwise, the bedroom is my children's domain as long as they respect that I need the common living areas neat and tidy.

Being prepared in advance is critical. Pack your backpack and lunchbox the night before. Sometimes, we even load the car up the night before so there's less hassle in the morning. Try to select your clothing for the next day before you go to bed.

With a bit of practice and trial-and-error to see what works and what doesn't, you can probably get yourself organized and stay that way!

## Chapter Eleven

### Staying Awake and Focused During Lectures



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Is learning in a step-by-step manner difficult for you? Maybe it isn't, but for many VSLs, it's as though the stuff that's really hard for most people is quite easy to them. But then the stuff that other kids think is simple is really tough for a VSL. This is because challenging new material flips the on switch of the right hemisphere of your brain. When you get to something that's new and interesting, it's as though the right side of your brain is suddenly awake and ready to learn. You really can't zone out or doze off if what you are learning is new, interesting, funny or challenging. Your right hemisphere has to stay in the act and it's happy to do so! But, the minute the learning becomes boring, or just words coming at you, you might as well get out a pillow and fall asleep, right? I've got some good news and I've got some not-so-good news.

Here's the not-so-good news first: There will be some class or lecture or boss or *somebody* that you absolutely must pay attention to no matter how incredibly boring they are. Your grade or raise or job will depend on it. It's impossible to avoid such a situation. It's bound to happen. It happens to everyone.

The good news is: You are in charge of your right hemisphere! You decide whether it's nap-time or time to wake up and get in the game. The right hemisphere wants something more to do than just hold up the other side of your brain! So give it the opportunity. Even if you are listening to the most boring lecture of your life, you can do something to wake up that part of your brain that just wants to zone out. Here's how:

- Start by taking notes in pictures of what is being said. Even if you don't need the notes, just draw images of what the speaker is saying. These don't have to be elaborate or even artistic; just get involved in really listening to the words so you can create matching drawings.
- Whether you're taking notes in pictures or words, use colored markers or an ink pen that lets you change colors. Use a different color each time a new bit of information is introduced or each time a different subject is mentioned. Using color will help you to remember your notes if you are quizzed later. You'll be able to see the notes, rather than remembering the words.
- Can you make a movie in your mind of what is being said? Closing your eyes in class may not be a good idea, but try to get enough information from the lecture that you can create a movie from it. Then, you can rewind your movie and play it over and over.
- Try doodling to keep you focused, even if the doodles don't have anything to do with what you are listening to. Draw the speaker in his underwear, for heaven's sake! You're just trying to stay focused on the information.
- Bring a small object to fidget with while you are listening. A hacky sack ball might work or a balloon filled with flour (and tightly sealed!) or any other



small object you can find. Just don't let it distract you and don't bother anybody else with it. Use it only to help you concentrate on the words of the lecture.

- If you know you're going to have to listen to a lecture, ask the teacher for an overview first. Your brain prefers big picture information first, so ask for it. Then, as you're listening to the lecture, you'll know where the talk is headed. You can even take your notes (in words or pictures) in the margins of the overview, filling in the details from what the speaker says to match the outline given to you.

- Stay on top of the lecture by trying to predict where the speaker is going. What is their point? What are the important facts? If you were to stand up and quiz the rest of the class, what would you put on the test?

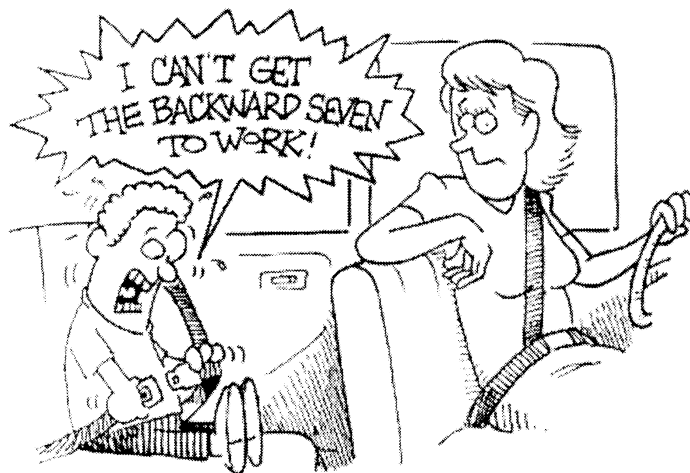


## Chapter Twelve

### The Dreaded Timed Test

Have you ever had a hard time finding the word you're trying to say? Or the one word that truly matches the picture in your head? The process for a visual-spatial learner to translate mental images into words (or numbers) is a lot like a computer downloading graphics. If you've ever downloaded a photograph on your computer, you know that it takes a lot longer than it takes to bring up text. Because of the way your brain works, you have to not only "download" your mental images, you also have to convert them to words. When there's the pressure of a time limit, it can be really hard, if not impossible, to do.

I have a funny story for you about Matt: One day, when he was about seven years old, I was backing out the driveway and he started panicking saying, "No! I'm not ready, don't go!" I called back, "What's wrong?" Matt hollered, "I can't get the backward seven to work!" The panic level in his voice was rising. I kept backing up while I was thinking, "Backward seven? What is it? How does it work? And why does he need it?" As I started to drive forward, Matt started yelling at me not to go. When I got to the stop sign, I looked back to see that he couldn't get his seatbelt fastened. From Matt's point of view, his seatbelt was clearly a backward seven!



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Because Matt could only see the picture in his mind and because there was pressure for him to tell me what was wrong (he knew better than to be in a forward-moving car with no seatbelt on), he could not translate his picture into a word. He was left with a "backward seven" because he couldn't translate his picture to the word, "seatbelt," fast enough to get me to stop the car.



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This happens a lot to visual-spatial kids when they are taking timed tests. Has it happened to you? Most VSLs can't translate their pictures into words (or numbers, if it's a math test) very fast if they are under pressure knowing they have a limited amount of time to get out the correct answer.

If you find this happening to you and there doesn't seem to be any way you're going to get out of taking a timed test, try these tips to help you speed up your translation time:

- Play games with your friends and family that require you to answer within a specified time. Cranium™, Scattergories™, and Boggle™ are good examples of games that come with timers.
- Add a timer to your favorite game. Putting a time limit on Scrabble™ or Upwords™, will be like taking a timed spelling test. Adding a minute glass to Yahtzee™ may help you with timed math tests. You can use a minute glass (mini hourglass) or kitchen timer to limit the amount of time.
- Play Pictionary™ to practice translating words into pictures, then back into words. Add a time limit to the game, too. Charades is a fun game to play where

you start with a word, then act it out in order to get the players to say the word.

- While you're in the car, play games like "I'm Going on Safari" where players think of what they'll bring in alphabetical order. So, the first player says, "I'm going on safari and I'm going to bring an apple (anything that starts with the letter "a"). Then the second player says, "I'm going on a safari and I'm going to bring an apple (or whatever the first player said) plus a beagle (anything that starts with the letter "b"). And so on, through the alphabet. This requires players to keep words (or pictures they must translate into words) in their minds through the entire game/alphabet. Add a time limit to thinking up a new word and remembering the list.

If the ticking of a timer bothers you, make sure you use a sand-filled minute glass. These can be found in many games and game stores in two or three minute versions.

### **Understanding the passing of time**

Visual-spatial kids—and adults—are generally known for not having a very good sense of time. Most can get so lost in what they are doing, that they forget altogether about whatever else they are supposed to be doing. Does this sound like you? Are your parents always on your case about getting to bed when it seems like you've just started having fun? There are lots of times you are expected to know just how much time has gone by and that it is time for you to move to another activity. Throughout the school day, subjects end and new ones begin, forcing you to stop what you are doing and move to the next activity. No sooner are you home from school than your mom is hounding you about getting your homework done, right? Then, just when you've finished your homework and chores and you've finally found something fun to do outside, you're being called in to dinner, right?

Well, here's a trick to help you get a feel for when certain periods of time have passed. Visual-spatial kids often get so

involved in what they are doing that 15 minutes feels like less than five. Do you have a board game that comes with a small minute sandglass? Usually these come in one, two, or five minute increments. Find one and use it the next time you are playing computer or with your toys. Set it next to you and see just what five minutes of playing feels like. When you tell your mom or dad that you'll, "be there in just a minute," use the timer so you'll know exactly how long one minute really is. You can use a kitchen timer too, it's just the annoying ticking can be really distracting! Or, you can ask someone to let you know when exactly five minutes have passed. After awhile, you'll should start to get a better idea of what one minute, two minutes or five minutes really feels like.

## Chapter Thirteen

### Communication and Self-Advocacy

Do you ever feel as though people just don't understand you? Do you have a hard time getting across what you want to say? Do you ever think you've done just what your mom or dad or teacher asked, only to learn later that that wasn't what they wanted done at all? If your parents or teachers are not visual-spatial thinkers, like you, they are probably communicating to you in ways your brain doesn't get. And, you are probably communicating to them in ways that their brains don't get! It's all about communication.

If you are a visual-spatial learner and your parents (or teachers) aren't, they might not be communicating with you by helping you create pictures in your mind. They probably aren't using pictures to get their ideas across of what they want done. So they probably aren't always happy with your responses, right? Communication between visual-spatial learners and auditory-sequential learners is doomed to fail if people don't understand that not everyone thinks the same. If you can't see what it is your parents want from you, or if your picture of caring for the family pet, or straightening your room, doesn't match your parents' picture, you're probably not going to do what your parents think they asked of you. They are likely to be disappointed with your results. It's up to you to make a difference!

By now you understand that you think in images, so make sure the image in your mind is exactly what other's have in their mind. Just double check! If your mom asks you to wash the dishes after dinner, make sure you have a clear picture of what she's asking. Does she mean *all* the dishes used to make and eat the meal? Does she want some of the dishes dried and put away? Can the china go in the dishwasher? What about the pots and pans? Does she mean to hand wash those? What **exactly** is mom's idea of "wash the dishes?" Does she mean immediately after you've eaten or sometime

that evening? (I'm pretty sure she didn't mean the next morning!) Just ask the questions and make sure you have a clear picture. It'll save you a lot of headaches, I promise. Notice: I speak here as a mom with experience! My children have been known to bring down a single item of clothing when asked to go get their laundry. Trust me, your pictures don't always match your parents' pictures. Agreed upon mental images is the only way to avoid hassles with miscommunication.



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## **Self-advocacy**

Self-advocacy is the art of being able to advocate, or speak up, for your own needs. It's feeling comfortable enough with what you know about yourself to say, "Wait, I don't understand. I need to see it. Can you *show* me?" Or, like Matt did in the story I told you about earlier when he was doodling during a lecture; it's knowing that you haven't done anything wrong and standing up for yourself. Whether you are advocating for yourself with a parent, a teacher, a music instructor, a sports coach, a friend, or anybody else you are trying to communicate with, feeling confident enough to stand up and say exactly what you need takes courage. It is a valuable strength to be able to this.



As a visual-spatial learner, self-advocacy may come in handy if you are in a situation in which you can't create a mental picture of what is being taught to you. When you understand your own learning style, you can let others know that you think and learn in pictures. If there is no picture, there is no learning. Ask them to show you what they mean. If all they do is toss words at you and you are not able to create a picture to match those words, you cannot learn. However, if your parents and teachers can help you learn the information by communicating with you in images, you absolutely can learn. You'll learn the information and you'll remember it.

Let's say you're learning a history lesson in class. The teacher is talking to the class and not using any visuals. What can you ask for that will help make the information stick in your brain? How about a map or a globe? How about pictures or drawings of what the people of that time looked like? If there's a computer in the classroom, can the teacher find something on the Internet to show you, and the class, what you're learning?

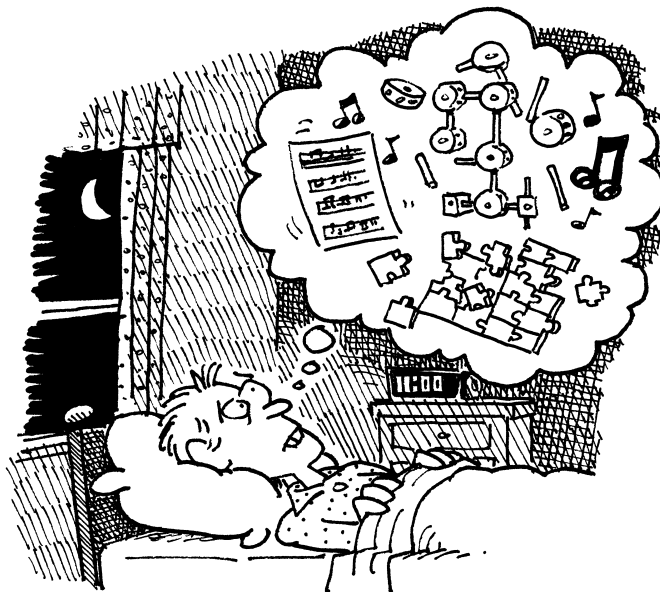
Can you look up more information when you get home? It would only take a couple of minutes to look up what your teacher was talking about and get some **visuals that will stick in your memory** of what you were learning. Understand that your brain needs pictures and then find them. You are in charge of your learning and if you learn differently than your teacher teaches, you will need to take a little bit of extra time to get the materials you need.

By the way, don't feel embarrassed to ask for more visuals and more hands-on projects from your teacher. I guarantee you that you are not the only visual-spatial learner in your classroom. There is research that shows that possibly as much as half your class thinks and learns this way. So when you ask your teacher to help you learn better, you're also helping out lots of your classmates. In fact, even the kids who don't think in pictures will learn better if the teacher uses

visuals. So don't be afraid to speak up! You're helping yourself and lots of your friends.

## Chapter Fourteen

### Sleep Issues for Visual-Spatial Learners



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Are you one of those kids that can't get to sleep at night? At least not when your parents want you to? Do you find yourself too wired for sleep at "bedtime"? Maybe you're still busy on your computer or Instant Messaging your friends? Or maybe, now that your left hemisphere can take a break from the school day, the right hemisphere is wide awake and ready to create inventions?

If you have trouble getting to sleep at night, I've got some tips that might help. First, you need to understand how important sleep is for your body and your brain. You may think you're getting along just fine without much sleep at night. But, if you were getting the amount of sleep your body needed, every night, you would do better in school, sports, music—even your relationships with your friends and family might improve. Each person's need for sleep is different so there really are no guidelines after babyhood of how much sleep you need. However, if you find yourself dozing off in class, you should start with an earlier bedtime.

Sleep researchers believe that sleep, particularly deep sleep,

...allows the brain to review and consolidate all the streams of information it gathered while awake. Another (study) suggests that we sleep in order to allow the brain to stock up on fuel and flush out wastes. A third, which has been gaining currency, is that sleep operates in some mysterious way to help you master various skills, such as how to play the piano and ride a bike. (Time, December 20, 2004, *Why We Sleep* by Christine Gorman, pp. 48-49)

Researchers have learned that most mammals, including humans, switch between two different phases of sleep: REM (rapid eye movement) and non-REM. It is during REM sleep that people experience increased brain activity and vivid dreams. REM sleep is critical for humans but you have to go through the stages of non-REM sleep in order to get there. Also, learning something new just before you go to sleep will help you remember that information better. So, any significant studying for an exam should probably be done just before you go to bed. Have you ever gone to sleep with a problem on your mind, only to wake up in the morning and have the answer? This is because your brain is still working, reviewing the day's events, even though you are no longer conscious.

OK, so now you understand the importance of sleep, but how do you get to sleep in the first place? Here are some tips to help you become relaxed and restful enough to get a good night's sleep:

1. Set your body clock by keeping the same sleep schedule, seven days a week. Don't try to catch up by sleeping late on weekends.
2. Create an environment that helps you sleep, not one that keeps you awake. A cool, dark and

uncluttered room should help. Eyeshades or ear plugs can also help.

3. No caffeine in the afternoon or evening. This means no soda pop or chocolate. You should avoid spicy foods. Finish eating at least three hours before bedtime.

4. No computers, TV or arguments half an hour before bed. Research indicates that the body's production of melatonin (which helps you sleep) is reduced by playing computer or watching television.

5. Soothing music is often helpful. So are warm baths.

Sometimes, there are so many pictures in the mind and imagination of a visual-spatial that falling asleep seems impossible while you toss and turn with ideas. Does this happen to you? One trick my visual-spatial husband uses to help ease his mind is to always keep a pen and pad of paper at his bedside. Then, as ideas flood him, he can write them down and know they can be considered in the morning. If you find that your head is swimming with inventions, homework, To Do Lists, etc., you might try keeping something near with which to write.

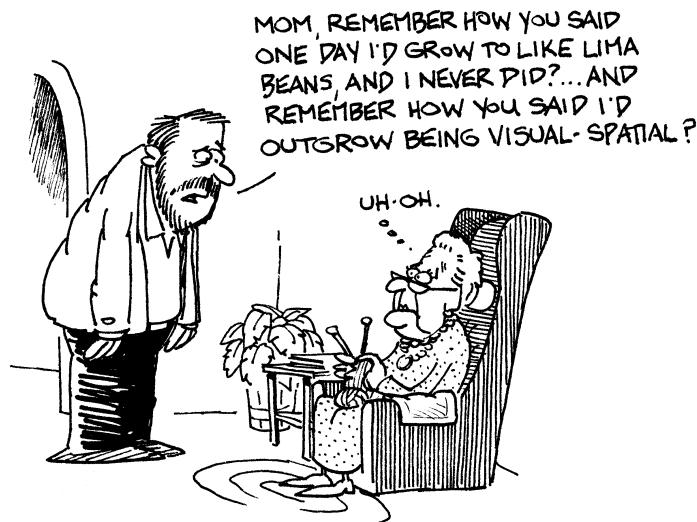
So, let's say you've gotten yourself to sleep. Now, how do you stay asleep? Both of my kids have been prone to nightmares. Do you suffer from nightmares that seem so real you have trouble shaking them from your memory when you wake up? You might try using a dream catcher and hanging it above your bed. Dream catchers have been used for generations. Native American legend says that dream catchers sift through the sleeping person's dreams, catching those that are good and sending the bad dreams through the hole in the center. Hopefully, establishing a relaxing routine of a warm bath and soothing music will be enough to help you drift into a deep enough sleep that nightmares aren't troublesome for you.



## Chapter Fifteen

### Your Future Awaits

I wrote earlier that your time in school will probably be the only time you ever think you are not as smart as your sequential friends. Once you've gotten beyond elementary, middle and high school, your gifts will come to light. You will no doubt focus on a university degree and career that uses those many gifts. And you'll be successful because the classes and jobs will be your choice. People with visual-spatial strengths will have a wide range of career choices awaiting them, many of which have not even been created yet. Computers will be more and more a part of everyone's lives. Your generation seems to have come into the world pre-wired with the knowledge of how to use computers to your advantage.



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You will always be a picture-thinker. You will always have a wonderful imagination and limitless creativity. Use your talents and gifts! You might want to consider a career in higher level mathematics, science, invention, architecture, surgery, cartooning, aeronautics or cartography. All of these

are specialties that make use of your ability to think in multiple dimensions and from varied perspectives. What about pursuing art, music or drama as your living? Follow your heart and choose something you love, something your brain was uniquely wired to excel at. Any restrictions to what you want to pursue, as an adult, are simply the limitations you place on your own imagination.

You should understand by now what a gift it is to have been born with such a powerful right hemisphere. Because this century is so technologically driven, your natural abilities with the computer, and to find multiple solutions to problems, will help you succeed in anything you choose to do. The skills you possess of seeing in multiple dimensions and creating new inventions will take you as far as you want to go. All of the skills you have as a result of being a visual-spatial learner are skills that will increase in value as you get older and as society recognizes more fully how truly gifted you are. The abilities you are able to bring to the table are vitally needed in the 21<sup>st</sup> century. Just remember, if it seems as though a door is closed to you, for whatever reason, go find a window. There are many non-traditional ways of gaining a higher education. There are many non-traditional ways of starting a career. There are many non-traditional ways of achieving personal, even financial, success. Visual-spatial kids like you are the future leaders and innovators of our global community.

If you'd like to learn more, please visit my website at [www.visualspatial.org](http://www.visualspatial.org). If you have a question or idea you'd like to share with me, feel free to write me at the Visual-Spatial Resource. My address is [alex@visualspatial.org](mailto:alex@visualspatial.org). I'd love to hear from you. I do hope you've enjoyed this book and feel ready to take on those subjects in school that felt challenging before.



## About the Author



**Alexandra "Allie" Golon** is Director of the **Visual-Spatial Resource**, a subsidiary of the Institute for the Study of Advanced Development, in Denver, Colorado. As a founding member of the Visual-Spatial Resource Access Team, a former G/T teacher and homeschooling parent to two exceptionally gifted visual-spatial learners, Allie brings a wealth of experience to her books, ***Raising Topsy-Turvy Kids: Successfully Parenting Your Visual-Spatial Child*** and ***If You Could See the Way I Think: A Handbook for Visual-Spatial Kids***. Allie

has been invited to present on parenting and teaching visual-spatial learners at state, national and international venues. She has counseled dozens of families regarding various homeschooling issues and harmoniously parenting visual-spatial learners and has appeared on talk radio programs and in print media. Allie can be reached at [alex@visualspatial.org](mailto:alex@visualspatial.org).

## What people are saying about Allie's work with visual-spatial learners:

***From a participant in the If You Could See the Way I Think children's workshop in Melbourne, Victoria, Australia:***

Dear Allie,

The things I learnt at your presentation I did not know before. It helped me understand why I'm bad at maths. It made me feel special. Thank you for helping me realize who I truly am.

***From a parent who attended a Raising Topsy-Turvy Kids seminar in Christchurch, New Zealand:***

First time in a long while that I have sat totally mesmerized...thank you so much.

***From a consultation client in St. Louis, Missouri:***

I just wanted to say thanks for all your help and suggestions! It's amazing to me that I have been to multiple doctors... Psychiatrists, Psychologists, Neurologists and Pediatricians for 6 years now to try and get some help for J, not to mention the thousands of dollars we have spent trying to get some answers and after a 1 hour phone conversation with you I feel like I FINALLY have some answers! THANKS SO MUCH!

***From a public school district in Edmonton, Alberta, Canada***

Your sensitivity and perceptiveness are so evident. You are so in tune with people. Thanks for sharing your wisdom and warmth with us.

# If You Could See the Way I Think: A Handbook for Visual-Spatial Kids

***If You Could See the Way I Think*** is aimed at visual-spatial students who can use help in the following areas:

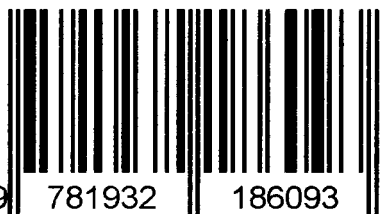
Spelling  
Handwriting  
Self-advocacy  
Taking timed tests  
Managing sleep issues  
Memorizing times tables  
Taking meaningful notes  
Getting and staying organized  
Focusing during auditory lectures  
Creating outlines and written reports

This book is a celebration of the gifts of those who prefer a visual-spatial learning style. The 21st century will demand the skills set these students were born with: multi-dimensional imagery, facility with computers, and an innate ability to "think outside the box."

It's time to help them be successful in our  
left-hemispheric classrooms!

***If You Could See the Way I Think*** is like having a personal tutor at your child's or student's fingertips.

ISBN 1-932186-09-3



To learn more about the visual-spatial learning style, or for information on other books, presentations and consultations, please visit ***Visual-Spatial Resource*** at [www.visualspatial.org](http://www.visualspatial.org)

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