

Education After The Collapse

Strategies for teaching elementary basics,
no matter where society might find itself; now and in the future.

By: Todd Sepulveda

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Thank You

I would like to thank the teachers that I work with on a daily basis. They are truly heroes in my book. I would like to give a special thank you out to Ms. Gates for use of her measurement flashcards and Ms. Wynn and Ms. Basham for critiquing my chapter on reading.

I would also like to thank those businesses that have sponsored this ebook, helping to make it free to the preparedness and education community. If you are in need of preparedness or survival supplies, please patron their websites.

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Thank You, Todd

What People Are Saying...

In [Education After the Collapse](#), you will be reminded that different children - and people for that matter - have different capacities and styles of learning. That said, within the scope of those differences, teaching children to solve problems and think critically is probably the most important lesson of all...

...But even more important, if you care about our world and you care about society, you will want to read the rest of [Education After the Collapse](#). And after reading it? You just might - like me - want to stock up on some textbooks, paper, writing materials and flash cards so that you will have them for the children of the unprepared - if and when the time comes.

Gaye @ www.backdoorsurvival.com

“Why would I want to review yet another post-apocalyptic book?” you may ask. Simply put, “[Education After The Collapse](#)” is like none other. Where most books I’ve reviewed address the skills and knowledge needed to survive a long-term catastrophic event or as some of us fondly like to call it, “the end of the world as we know it”, this book looks beyond the actual event and addresses a matter that most of us haven’t considered - post-apocalyptic academia...

...After reading “[Education After The Collapse](#)” I’m really puzzled as to why it has taken this long for someone to step up to the plate and write an easy to understand book that both reminds us how valuable our education is now and how valuable it will become to those who come after us - no matter what the event.

Survivor Jane @ www.survivorjane.com

Introduction

My journey into preparedness started as a joke and then a spiritual revelation. I was attending a staff development at my school. Everyone in attendance knew each other, except for the trainers. They started the training with an ice breaker, “go around the room, introduce yourself, tell us what you do and one thing that no one knows about you.” Well, like I said, everyone knew each other.

I was sitting next to my principal. I turned to her and told her that I was going to have a little fun with this. So when my turn came I said, “My name is Todd. I’m one of the AP’s here. One thing that no one knows about me is that I’m the webmaster for Houston Zombies dot com.”

It was funny to see everyone’s reaction. So I continued, “we sell zombie attire, books, dvd’s, etc...” During the break and even days after, people kept coming up to me asking me if I really was the webmaster for Houston Zombies dot com. If they would have gone to the website, they would have realized that it didn’t exist.

Well, the name stuck and one day out of boredom, I registered the domain and set it up to have some fun, complete with a “store” that linked to Amazon so that I could sell Zombie stuff! *I have taken down that site and transferred the hosting to www.prepperwebsite.com. I have uploaded the site, without the cool zombie template, to a free WordPress site. You can see it here – <http://houstonzombies.wordpress.com/>. Warning – the site template is ugly. 😊*

At the same time I was playing with the site, I was getting really concerned with the economy and the state of affairs around me. Something just didn’t sit right with me...a feeling.

I’m an ordained minister and pastor a home church. As the beginning of 2010 was coming around, this “feeling” was really coming to a head in me. As the New Year was approaching, I was seriously praying about where the Lord was leading me...and especially what message/sermon I should prepare for the first sermon of 2010.

Now, a lot of churches and ministers use the first sermon of the year to “reset” or set the tone of the year ahead. Imagine sermons like, “10 Reasons why 2010 is Going to be Your Best Year!” I had done that in the past... But I couldn’t do it this time. I couldn’t shake the feeling...the leading that God’s people needed to be prepared for uncertainty and different times that we haven’t been used to.

Don’t get me wrong, I’m not running scared or cowering in fear. But I believe that God has always hinted and shared with His people where things were headed: Noah, Abraham, Joseph, Moses the prophets, etc... The thing is that His people didn’t always heed the warning signs.

I don’t want to come across like a paranoid freakazoid etc... (they’re are plenty out there). But I do want to be prepared and help others understand that there are good reasons why the public

needs to be prepared for uncertainty. It's insurance. You hope you never have to use medical, auto or home insurance. But you have it in case of an emergency. There are skills and things that you can do to help prepare for unforeseen situations. Hopefully, you never have to use them. But if you do, you'll be glad you did.

This book is about being prepared, prepared to educate young people in case it all "hits the fan." It marries two of my passions, preparedness and education.

The preparedness community rarely thinks about education after "the big one." In my search, I have found relatively few articles devoted to this. We are always gearing up for what "might" happen. We purchase food, firearms, gear and more to be prepared for that day.

The education community rarely thinks about preparedness. In fact, schools are very poorly prepared for the possibility of something major happening. We pride ourselves on conducting one fire drill a month. Again, what about "the big one?" Many people say it is not if, but when.

This ebook does not serve as an all inclusive book on educating children. You could fill up a stadium with all the books written on education. Instead, it should serve as a primer to get us all to think a little bit more about preparing to educate if the need arises. If you read this ebook with that in mind, then the basics that I write about should spur you to learn more.

At the very least, hopefully some of the strategies that I write about will help you to understand your elementary child's education better.

As you consider The End Of The World As We Know It (TEOTWAWKI), I wish you peace.

Todd Sepulveda
Summer 2012

After the Collapse – 2018

A Scenario of “What If”

Fear is a powerful thing, so powerful that it can bring down nations. That’s what happened. Fear and panic brought down the most powerful nation in the world. It also brought down all the other world economies too. But that didn’t really matter for Susan and her family. It didn’t really matter what was going on in other parts of the world. They had enough problems of their own right here and now.

The economic collapse was a slow spiral that picked up exponential speed. It started with rating downgrades, first banks then nations. The stock market had a few bad weeks and then crumbled. The U.S. declared a bank holiday to try and stem the speed of the spiral, with no real benefit. The nightly news segments became more and more negative: reports of cities and states going bankrupt, people on welfare not receiving their checks, looting in some of the cities devastated by the economic turndown, news footage of people fighting in lines at grocery stores and banks. The panic picked up speed.

It soon started to affect the better to do states and cities. Even those that weren’t experiencing financial problems soon started to experience uncertainty due to the panic that everyone felt. Years of uncertainty and stress started taking their toll.

Soon, people stopped going to work, paralyzed by the panic and fear they were reading and hearing about, an uncle here in this town, a cousin or parent in that town. The much reduced police forces couldn’t do anything to keep order. It didn’t take long for the government to declare a national emergency and martial law. The declaration just fueled the panic. Riots ensued and they were too big to be squashed by the military. Not to mention that soldiers were worried about their families and couldn’t stand the thought of firing upon U.S. citizens. When word got out that the military couldn’t control the riots, many soldiers broke rank, took their supplies and went home to protect their families.

The spiral continued. Soon hospitals were not being manned and basic utilities weren’t being operated. The lack of electricity powering the grid just added to already inflamed tempers. With a lack of logistical support, the nuclear power plants that had back up power generation soon ran out of fuel and lost power. Nuclear reactors soon melted down and large amounts of radiation were released into the atmosphere. Those who didn’t have the means to get out of the way of the radiation in the prevailing winds soon became sick and many Americans died.

The citizens of Kensington fared better than most. Their tiny community seemed to be isolated from the big city. The fact that the community was not on a major highway helped too. But they still had their share of problems.

As society continued to break down and the cities became unsafe, friends and family members made their way to Kensington. It was fine at first, the community was welcoming and tried to help as many as they could. However, as the spiral continued, the community saw more and more outsiders come through. Again, the community was welcoming and tried to help as many people as possible. Churches were open to strangers and school cafeterias emptied their shelves to feed them. But that didn't last long.

A group that was very hungry and desperate came through one day. They didn't want to wait at the church for a meal. They pushed their way into Mrs. Granset's home to get something to eat. When the old spitfire put up a fight and demanded that they leave her home, one of the intruders shot her!

The 9mm shot was heard by the neighbors. They came right over to see what had happened, but were met with more gunfire. The small community soon was on alert and every man over the age of 18, who had grown up hunting, surrounded the house and instantly became snipers. When the man welding the 9mm was shot in the head through the window, the others in the house gave up without a fight.

Because they didn't pull the trigger, the other intruders were taken to the edge of town and told never to return. Mrs. Granset was buried in her family plot in the cemetery and the dead intruder was buried in an unmarked grave. The citizens of Kensington were not remorseful that they had to take down the killer, but they did mourn Mrs. Granset.

The community came together to discuss security and safety. They decided to not allow strangers through again. Anyone coming into the community had to have a direct connection with someone living in Kensington.

With the little diesel that they had left, they moved several big pieces of unnecessary farm equipment across each road leading to the city. Anyone approaching would have to exit their vehicle to walk the rest of the way. At that point, they were met with a two person security station, 150 yards out, that would turn them away and fire a warning shot if necessary. It didn't stop everyone trying to come into the community, but in the early stages, when people still had gas to travel, it helped tremendously.

After five years, life still hadn't returned to normal in Kensington. The community helped each other as much as possible. Older people, grandparent types with the skills of a simpler time, helped the younger generation with the understanding to do things without the conveniences they had come to depend on. It wasn't easy, but they were surviving.

The government was still in shambles and news reports, at first spread by HAM radio, were short

to come by, mostly unconfirmed rumors. Days turned into weeks, season to season. And Susan turned seven years old.

The times dictated the life that Susan experienced. Before the collapse, she would have attended pre-school, pre-K, Kindergarten, but she was 7 years old and had never attended a day of school in her life. It was around her seventh birthday when her mom realized this.

But schools weren't a priority in these times. The small community of Kensington was barely staying afloat. However, Susan's mom realized that she couldn't go through life without the basics of reading, writing and arithmetic. But she wasn't a teacher and didn't even know where to start.

This chapter depicts a scenario in how quickly our society could spiral out of control. It is fiction, based on our current economic climate. For more articles and info. on collapse, please visit - <http://goo.gl/67whV>

Chapter 1

Collapse?!? Really?

It's only in the movies, apocalypse. I hope so. But what if? It's not too hard to make the jump from our nice manicured lawns, suburban neighborhoods, Starbucks, 401K lives. On any given day TEOTWAWKI (The end of the world as we know it) can happen. Yes, this happens frequently on an individual or family level: losing a loved one, major medical situation, loss of a job, etc. However, it is not in the scope of this book to talk about those specific situations, or on a small level. The focus of this book is on "the big one."

The big one could be a great number of things. A quick search on the internet will bring you a wide variety of scenarios. Or, just take a look at Matthew Stein's article "Six Trends Converging on Collapse." (Stein)

Even if we don't ever have the "big one," we are living unsustainable lives in which at some point, it will all come to a head.

But there are two scenarios that get my attention. They are not far-fetched at all, a pandemic and economic instability.

Pandemic – I'm not citing recent news on government funded programs mutating flu strands to see how long till it goes airborne (5 mutations). You can do a search for that online. But it doesn't take a rocket scientist to know that in our present ability to travel around the world, a strain of a deadly virus in one part of the world can make it to our part of the world in no time.

What would happen if a truly deadly virus found its way into our lives? If you knew it was out there, would you venture out? Would you send your children to school? Would you go to work? Would you go to the store to buy food, gas, or other necessities?

If a true pandemic hit, everything would shut down. Think about it. If you're not going to work, risking coming into contact with the deadly virus, why would police officers, doctors, nurses, teachers, utility workers or other government workers? Basic services will come to a stop...for days...weeks... And by then, how long till our society spirals down with people needing medical care, food, water, electricity, fuel? Do you see where I'm going with this? It's not that far of a jump. We've just never experienced anything like this before. But it doesn't mean that it can't happen. It has happened in the past, and many people are saying, It's not if, but when.

Economic Instability – You don't have to be an economist to know that things are bad in the economy. You just have to look at your bank account and budget. Your purchases at the

grocery store aren't going as far as they used to. Gas prices are up. The stock market can't make its mind up. Everything costs more.

Right now you might be "getting by." But what happens when you can't get by anymore? Prices are going up, your pay is at best stable, at some point, something has to give. More than likely, it's going to be the things you can purchase.

So what happens when you have to choose between making your mortgage, paying the bills and buying food? Can it get that bad? Many are already in that situation. According to a recent Forbes article, nearly 42 million people were receiving food stamps in the United States. Again, with the question, what happens when 42 million people can't purchase enough food to feed their family? This isn't a question of "should people be on welfare?" This is a real question about what people will do when they are desperate for assistance, have no job, no one else to turn to, and the government, who has been their benefactor can't come through.

It's not too far-fetched to think that people will become angry and riot with looting soon to follow. In September, 2011, a crowd of almost 600 showed up on the steps of the Department of Public Welfare Office in Darby County, PA. (Sullivan, 2011) They believed that the government would provide food stamps after their food spoiled due to power being off after Hurricane Irene. Police had to come in and provide crowd control. This was one place at one time. What happens when it is widespread? With government budgets stretched, this is a certain reality.

Do we expect people to act like the Japanese did during the Fukushima Nuclear disaster, calm and in control? We have experienced riots in the United States in times where there really wasn't a widespread crisis. If this happens, do you think people will be venturing out?

Are trucks going to make it to the grocery store? Are banks going to be open? This just touches the surface. When your dollar, that has made it easy for you to purchase the necessities of life, doesn't buy you the necessities, what can happen?

Yes, there a lot of questions asked here. I'm not trying to give you answers. Think critically and do some research. My goal here is to help you see how fragile we are. Things can go south very easily and most people are not prepared for it!

Stein, M. (n.d.). *Six Trends Converging on Collapse* . Retrieved March 13, 2012, from When Technology Fails: <http://www.whentechfails.com/node/1500>

Sullivan, V. (2011, September 11). *Near riot breaks out at welfare office in Darby*. Retrieved March 12, 2012, from News Network - Delaware County: http://www.delconewsnetwork.com/articles/2011/09/27/news_of_delaware_county/news/doc4e82025cb3944407724856.txt

Chapter 2 School When There Is No Classroom

It's not in the scope of this book to replace four years of a college education to prepare you to be a teacher. But there are some things that can be said here to put things in perspective as you set out to help children along.

One size doesn't fit all – They say that schools and churches are the slowest industries to reform. I have experience in both, and the statement is true. Our current form of education is based on the industrial revolution, when factories needed workers for the assembly lines. Students start their “shifts” at the same time, sit in straight lines, go to lunch, recess, sit in straight lines again and go home. The same is repeated 5 days a week!

What worked for you in your day, might not be the best learning environment for your child. Yes, there needs to be structure: a place to work, a time frame to do it in, work that should be accomplished. But that place doesn't need to look like a traditional school house or desk. Your child might work better outside in the fresh air. Sitting in a chair for 7 hours might not be the best thing for your child either. Could you do that? They need frequent breaks and time to process what has been learned before jumping to the next thing. There should be work, but working through a workbook might not be the answer. Whatever the structure looks like, it should be established and revisited to find the optimal learning environment for your child.

Children have different learning modalities – Along the lines of what has been mentioned above, children have different learning modalities. There are many, but they can usually be broken into visual, auditory and kinesthetic (VAK). Everyone “can” learn in each modality, but many have a preferred mode for learning. For instance, I could learn how to use flint and steel by listening to someone explaining the concept behind it (auditory), but I might understand it better if I could watch a video online (visual), however, to maximize my learning, I would really grasp the concept if I could do it with my own hands (kinesthetic).

Through time, I believe that people have learned differently. For instance, in ancient times, there were oral traditions and stories that were passed down from generation to generation. Children in those times might have been better auditory learners. However, now-a-days, with our electronic generation, students are very visual. And if education ever catches up with the real world, it would be valuable to teach children to learn by doing. How many children read the gaming manual before they put their new game in their gaming system? Most of the newer games don't even come with any type of documentation. They just put the CD in and go!

The most important thing is to learn to think critically – Information is increasing in exponential ways. With the information of the internet and eReaders that could hold thousands of books in one flat screen, children have a ton of information at their finger tips. Now in a collapse situation, where there is no access to the internet, this might not be the case. But even if, the most important skill that a child can have is the ability to problem solve and think through situations. This is best done in project based learning. Also, see the section on problem solving in the Math chapter.

Children mature at different rates – The nature of the classroom would have teachers comparing their students to each other. This has to happen so that teachers have a gauge on their instruction. However, individually, students mature at different rates. It is not uncommon for a student who has, for example, entered Third grade, to not work as fast or not seem to “get it” like the other students. Later, maybe after the winter break, something seems to “click” and the student seems to have “caught-up” with the rest of the class. This can be due to maturing later than the rest of their peers.

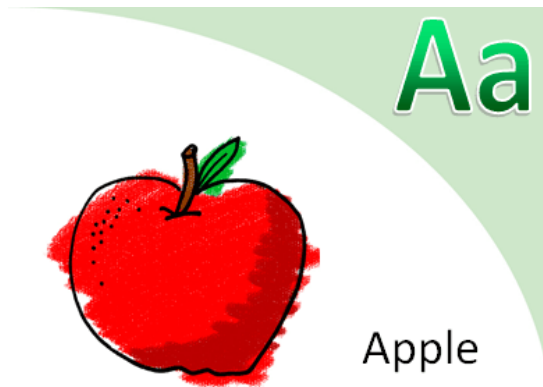
Ultimately, a teacher needs to know his students. In a collapse situation, you need to know how your child learns best. This comes by observation and experiment.

Chapter 3 Reading

Reading is the most important of all the subjects. If you can read, you can learn anything, if the books and resources are available. But although almost everyone learns to read, how does one go about learning how to do it? When you learned how to read, you were young and learned your reading skills in slow progression year to year. So unless you are a reading teacher, or an experienced homeschool parent, you might not remember or know the path on getting a child from learning the alphabet song to reading chapter books. How does one go about teaching a young child to read?

The best way to learn how to read is based on phonics. Students start with letter recognition and sounds and build upon that.

Sounds & Recognition - In the appendix, you will find a set of flashcards that are a free download template from Microsoft. You can use these, purchase a set or make your own. Children should start with learning these. For example:



The student recognizes the letter and says, “A.” Then the student says the sound, \ā\ . The student then says the picture that is identified with the letter, “apple.” This is repeated with every letter and should continue until the student is fluent in being able to go through the alphabet.

Please note: “Drill and Kill” will wear out most students (there are always exceptions). Adults/Parents should take into consideration the age of the child and how “taxing” the task being taught. Learning in short intervals, 10 minutes at the most, is best practice for students to learn and retain what they have learned. This doesn’t mean that the learning time for the day is

over, just that there should be a mental break from that one task and the opportunity to move to another task or learning objective.

It should also be mentioned that learning that is made fun will be more effective than a dry “get it done” mentality. Once, when my son was learning his multiplication tables using flashcards, I had my younger son do a short wiggle dance when my middle son got the right answer. We laughed and had fun, but learning was happening all along.

Sight Words – After the student has started to recognize the alphabet and sounds with some fluency, students should begin learning sight words. In the appendix, you can find a set of Fry’s 100 Sight Words. These are the first words that any student in First grade would learn. By following the link below, you can find Fry’s 1000 Instant Words and download resources. Fry’s 1000 Instant Words are the words that are most used in elementary for reading, writing and spelling. Visit Unique Teaching Resources - <http://www.uniqueteachingresources.com/Fry-1000-Instant-Words.html>

Students should learn how to read (identify on sight) and spell their sight words. I’ve seen teachers work whole group with students before and make this learning fun. Teachers will say the word, “that.” They will then spell out the word, with the students follow along. As they do, they tap their leg...one time for each letter, then they do it again and tap the side of their face, one time for each letter and then tap their head for each letter. It covers the 3 modalities of learning: auditory, because they are saying it out loud; kinesthetic, because they are touching and active; and visual because the teacher has the card with the word in front of them.

Reading – The next step in the reading progression is to actually read books. Of course, they need to be appropriate for the student’s reading level. This is where a little effort needs to be taken in acquiring resources. As an administrator, I have become familiar with A to Z Books (<http://www.readinga-z.com/>). A license for printable books can be purchased for under \$100. Yes, it is a pretty penny, but on the site you can print out tons of books on specific topics within reading. You can print out books on specific sounds, sights words, etc...

Also, a friend of mine, who grew up in a “Little House on the Prairie” schoolhouse told me that she learned to read using McGuffey’s Readers. She mentioned that the teacher never really worked with her. Instead, the teacher’s daughters, who were also students at the school, sat with her as she learned to read. From what I understand, the McGuffey’s Readers are a whole program. You can still purchase the program at <http://mcguffeyreaders.com/>.

Reading is the most important academic skill a person can learn. With this skill, and access to books, you can learn anything.

Chapter 4

Math

Although the chapter on Reading was intended for teaching from the ground up, this chapter on Math is going to be different. This chapter will focus on skills and concepts that deal with basic Math skills that are usually taught to 1st and 2nd graders.

Before we start, let's cover a few teaching concepts concerning Math. Math is taught in three different concepts: concrete, pictorial and abstract. Concrete Math would include touching and manipulating objects like counters, base-10 blocks, 3D shapes and fraction cubes to help establish the concept in the learner's mind. Pictorial Math is utilized when the learner graduates from having to use manipulatives and moves to models (pictures) on paper only. For example, a problem might still include base-10 blocks, but if the base-10 blocks are in a picture form on the paper, it is considered pictorial. Abstract math happens when the learner has moved beyond pictorial math. Think of a straight Math problem $23 + 14 =$ as abstract.

Basic Arithmetic – Every child needs to learn basic addition, subtraction, multiplication and division facts. These should be the foundation of Math. Unfortunately, in a public school setting, teachers don't have time for every student to know their facts before moving on. There are higher level concepts to teach and a test to take! But in a grid down/collapse situation, and/or only a few students to teach, there will be plenty of time to learn facts.

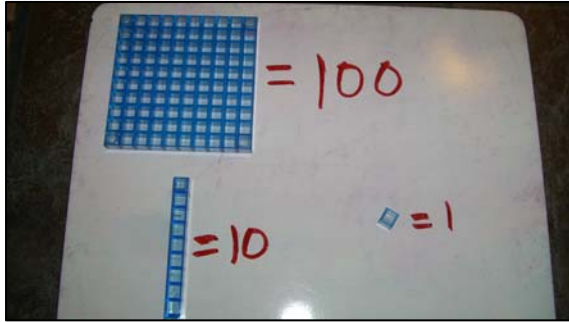
Facts just have to be memorized, plain and simple! For students who are having issues, there are strategies that they can use, but this always slows the student down and allows for opportunities to make mistakes. The above mentioned still stands, learning must be fun and not drill and kill (refer to the section on sight word flash cards).

The normal progression of learning basic math should be:

- Adding 1 digit numbers
- Adding 2 digit numbers
- Subtracting 1 digit numbers
- Subtracting 2 digit numbers with regrouping (a newer term for borrowing)
- Multiplying 1 digit numbers
- Multiplying 2 digit numbers
- Dividing basic problems
- Long Division

For the sake of this ebook, pictures of using base-10 blocks for addition and subtraction follow. Future videos will be shared on www.edthatmatters.com that walk through strategies for multiplication and division.

Base-10 Blocks

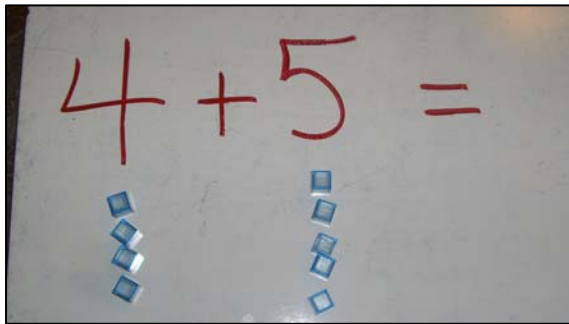


Single unit = 1

1 Rod = 10

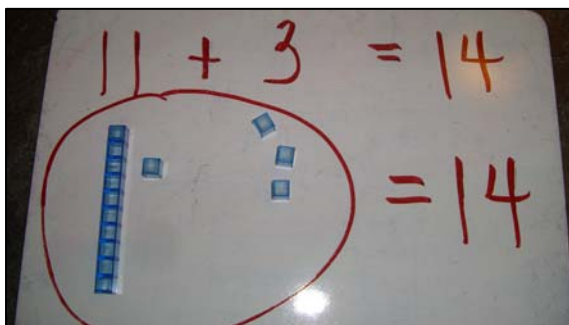
1 Flat = 100

Addition 1 Digit Numbers



In the problem to the left, you would put down 4 units then 5 units and then simply count them all up to = 9.

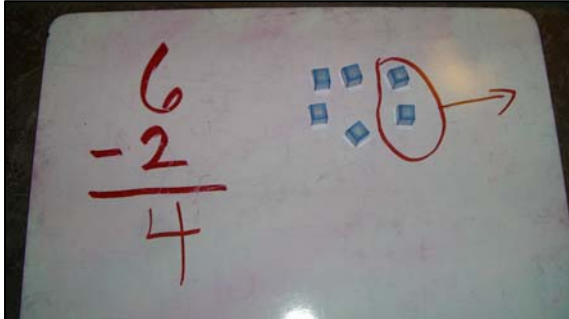
Addition 2 digit numbers



In the problem to the left, you would put down 1 rod and 1 unit then 3 units and then simply count them all up to = 14.

Subtraction 1 digit numbers

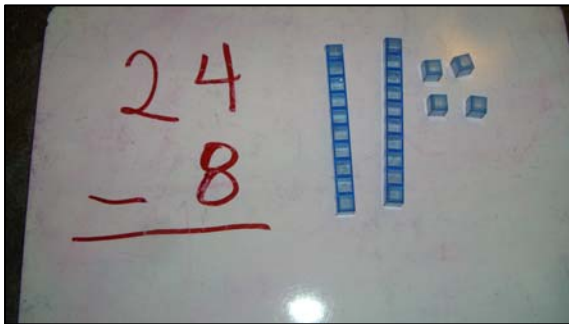
In subtraction, you only set down the base-10 blocks for the number you subtracting.



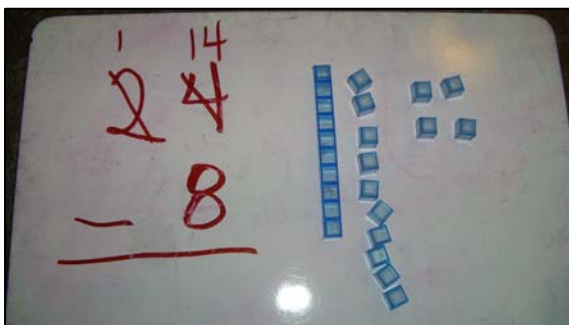
In the problem to the left, you would put down 6 units and then take away 2 units to = 4.

Subtraction 2 digit numbers (subtracting with regrouping a.k.a. borrowing)

This skill is a little bit more involved, thus the extra pics.

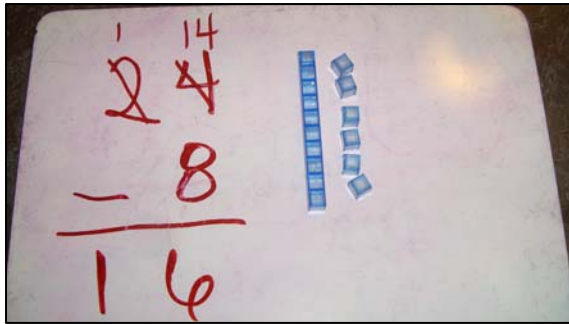


In the problem to the left, you would put down 2 rods and 4 units to = 24.



Because you cannot “take-away” 8 from 2 rods and 4 units, you must regroup (borrow) the 2 rods. 1 rod is exchanged for 10 units. At this point, the base 10 blocks still = 24.





You can now take away the 8 units. What remains is your answer, 16 units (1 rod & 6 units).

Measurement – A skill that anyone in a collapse situation will need to learn is knowing how to take a measurement. We are very lucky here in the US to have two different systems of measurement (I hope you can tell the sarcasm there), the Metric, which is used by the rest of the world and the Customary system, which is used primarily here in the US.

The way we teach measurement to students is with benchmarks. A benchmark is a real life item that has the same measurement as the unit of measure. This helps student remember the unit of measure.

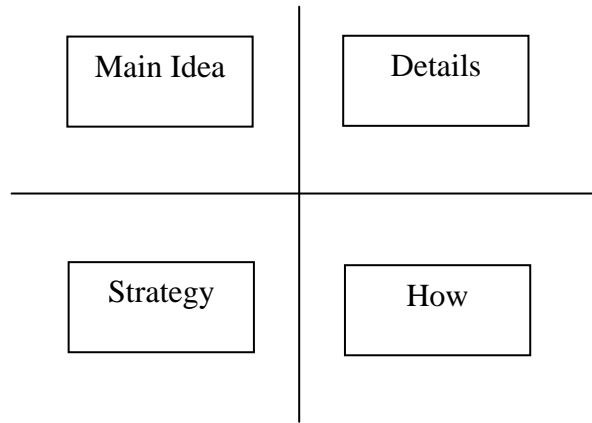
For example, to teach a student how long a Meter is, we let them know that the benchmark for a Meter is the length from the floor to a door knob.

For more examples of benchmarks and flashcards that you can cutout and use to memorize, please see the appendix.

Problem Solving – Although I have stayed with the basics of Math, I wanted to write briefly about problem solving. Even our first graders work with word problems, so I feel that it is appropriate and necessary to bring up here.

Life doesn't happen in simple strings of digits that you add, subtract, multiply and divide. Life happens and brings real problems along with it. So even Math won't do you any good if you don't know how to apply it within real everyday problems, that's why we teach problem solving skills.

Just like anything else, problem solving needs to have a process. The process that I'm family with in my district is something called the Window Pane. The window pane is basically a cross that has four equal areas where to "work" a problem. In education, we call the window pane a graphic organizer...a graphic that allows students to organize their thoughts and work out their problem using a problem solving process.



Main Idea – The main idea is where a student would write in what the question is asking. The important part is not to copy the question itself, but use 3-4 words to restate the question in their own words.

Details – The details is where a student would write the important details of the problem. This helps the student to separate the details from the extra information of the problem.

Strategy – The strategy is the place where the math work is done.

How – It is important for students to be able to verbalize “How” they came to their answer. Verbalizing the process helps to solidify the process in a student’s mind.

For an example of what this would look like, you can watch a video that I did about six years ago - <http://goo.gl/ti7i2>

Quick Story about the Window Pane – The first year that my district went to the Window Pane, I was teaching Math and Science in 4th grade. As students used the Window Pane in Math, I realized that this process wasn’t just for Math, but for everyday problems.

I brought this up one day during a parent conference and the parents agreed that their daughter had seemed to mature and was thinking through everyday type problems more than before and more importantly, she was making better decisions.

Other skills – There are many other skills that students need to know when it comes to Math. Finding area and perimeter, fractions, percentages and angles are just a few. As stated earlier, I plan to link to and/or upload videos to www.edthatmatters.com that will walk through the strategies for obtaining these skills.... Educators are finally coming around to what so many people already know – videos are very powerful!

Chapter 5 Science

Outside of Reading, this chapter should probably be the most beneficial in a collapse scenario. Science covers such a vast area of knowledge. And in a collapse scenario, Science would be your friend.

Knowing which plants are safe to eat, which animals should be hunted for the most nutrition, gardening and working with soil, etc... would all come under Science.

There is no way that I could do Science justice here. I by no means am a scientist. However, there were a few concepts that I taught as a 4th grade Science teacher that I think would be helpful.

Moon Phases – For the longest time, teachers who taught moon phases had no clue why we “had” to teach this. The real reason was that it showed up on the state test. It wasn’t till I opened up a copy of the Farmer’s Almanac that I realized the importance of knowing the moon phases.



A great resource to check out is - <http://www.gardeningbythemoon.com/phases.html>

According to the website:

“At the **new moon**, the lunar gravity pulls water up, and causes the seeds to swell and burst. This factor, coupled with the increasing moonlight creates **balanced root and leaf growth**. This is the best time for planting above ground annual crops that produce their seeds outside the fruit. Examples are lettuce, spinach, celery, broccoli, cabbage, cauliflower, and grain crops. Cucumbers like this phase also, even though they are an exception to that rule.

In the **second quarter** the gravitational pull is less, but the moonlight is strong, creating **strong leaf growth**. It is generally a good time for planting, especially two days before the full moon. The types of crops that prefer the second quarter are annuals that produce above ground, but their seeds form inside the fruit, such as beans, melons, peas, peppers, squash, and tomatoes. Mow lawns in the first or second quarter to increase growth.

After the **full moon**, as the moon wanes, the energy is drawing down. The gravitation pull is high, creating more moisture in the soil, but the moonlight is decreasing, putting energy into the roots. This is a favorable time for planting **root crops**, including beets, carrots, onions, potatoes, and peanuts. It is also good for perennials, biennials, bulbs and transplanting because of the **active root growth**. Pruning is best done in the third quarter, in the sign of Scorpio.

In the **fourth quarter** there is decreased gravitational pull and moonlight, and it is considered a **resting period**. This is also the best time to cultivate, harvest, transplant and prune. Mow lawns in the third or fourth quarter to retard growth.”

Clouds – The other skill that I think is advantageous to know is cloud identification and their meaning.

Stratus – Sheet like clouds.

This type of cloud usually means that it is going to rain, drizzle or be overcast for the day.



Cirrus – Thin and wispy clouds.

This type of cloud usually means good weather or that the weather is changing.

Cumulus – Puffy clouds, like cotton.

These clouds usually mean fair weather.

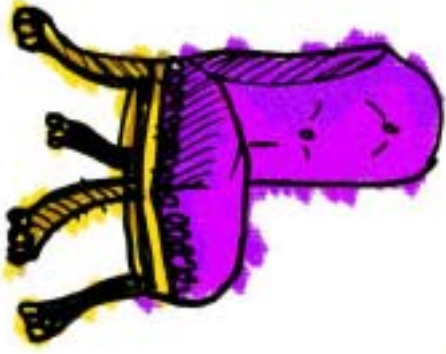


Cumulonimbus – Puffy, vertical clouds that flare out.

This type of cloud means that heavy rain/thunderstorms can be expected.

The Appendix

- Alphabet Flashcards – Recognition & Sounds
- Alphabet Flashcards – Recognition & Sounds
 - Fry’s First 00 Words
- Measurement – Benchmarks and Units - Metric
- Measurement – Benchmarks and Units - Customary



Chair

Cc



Apple

Aa



Duck

Dd



Ball

Bb



Giraffe

Gg



Eggs

Ee



House

Hh



Fish

Ff



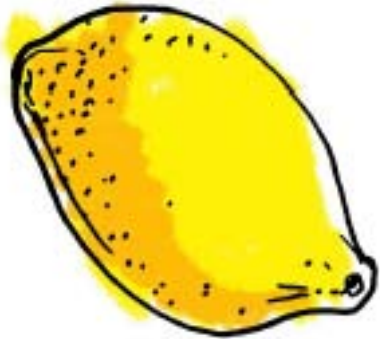
Knife

kkk



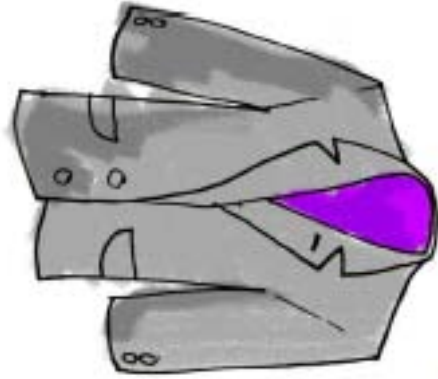
Igloo

iii



Lemon

lll



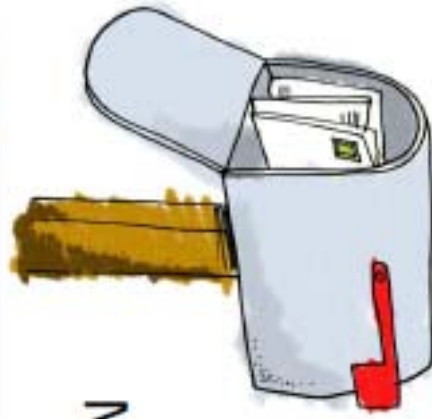
Jacket

jjj



Ocean

Oo



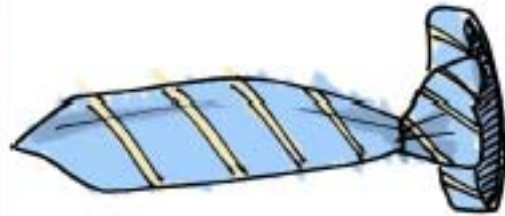
Mailbox

Mm



Parachute

Pp



Necktie

Nn



Socks

Ss



Quilt

Qq



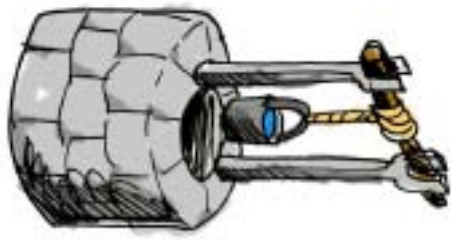
Tree

Tt



Rabbit

Rr



Well

Ww



Umbrella

Uu



Xylophone

Xx



Violin

Vv



Yak

Yy



Zebra

Zz

Fry's First 100 Words

1. the	26. or	51. will	76. number
2. of	27. one	52. up	77. no
3. and	28. had	53. other	78. way
4. a	29. by	54. about	79. could
5. to	30. words	55. out	80. people
6. in	31. but	56. many	81. may
7. is	32. not	57. then	82. than
8. you	33. what	58. them	83. first
9. that	34. all	59. these	84. water
10. it	35. were	60. so	85. been
11. he	36. we	61. some	86. called
12. was	37. when	62. her	87. who
13. for	38. your	63. would	88. am
14. on	39. can	64. make	89. its
15. are	40. said	65. like	90. now
16. as	41. there	66. him	91. find
17. with	42. use	67. into	92. long
18. his	43. an	68. time	93. down
19. they	44. each	69. has	94. day
20. I	45. which	70. look	95. did
21. at	46. she	71. two	96. get
22. be	47. do	72. more	97. come
23. this	48. how	73. write	98. made
24. have	49. their	74. go	99. may
25. from	50. if	75. see	100. part

Milliliter

Amount of liquid in a dropper of water



Liter



Amount of liquid in a large bottle of water

M

e

t

r

i

c

Kiloliter

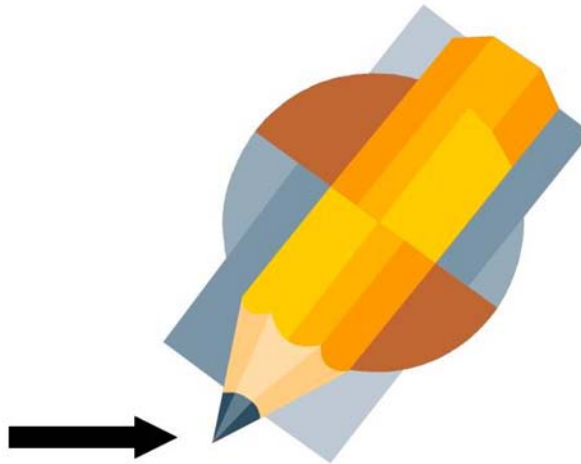


Amount
of liquid
in a hot
tub

1 kL = about 264 gallons

Millimeter

Width of
a pencil
lead



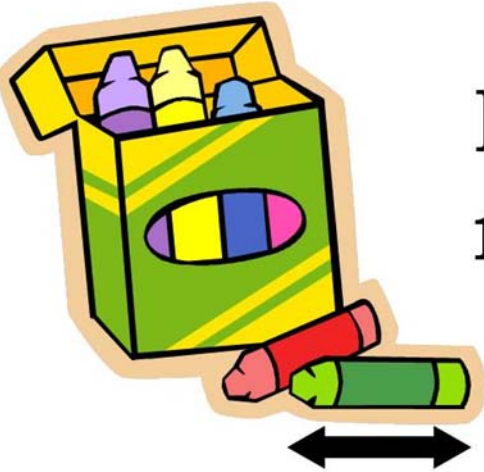
Centimeter

Width of
your pinky
finger



Decimeter

Length of a
new crayon



Meter

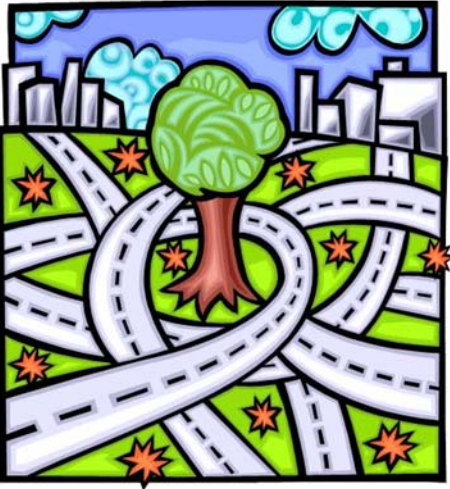
Distance
from the
floor to the
doorknob



Kilometer

Distance
from school
to Kroger

Less than a
mile

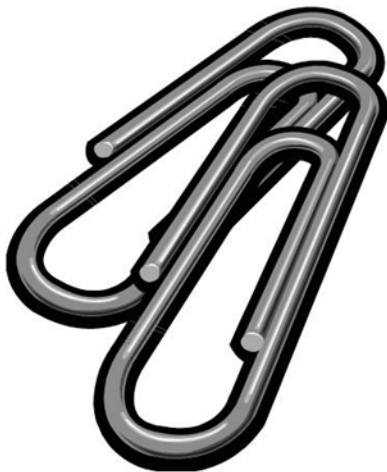


Gram



weight of
a grain of
salt

Gram



weight of a
paperclip

Kilogram



weight of a
textbook

Inch

Length of
hook finger

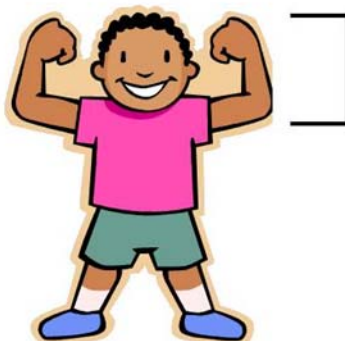


Foot

Length of
ruler



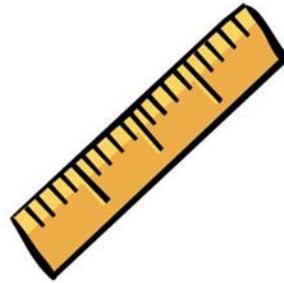
Length of
forearm



C
U
S
T
O
m
a
R
y

Yard

Length of yard stick



Distance from nose to fingertips



Gallon

Amount of a Milk jug



Quart

Amount in
a Gatorade
bottle



Pint

Amount in
an Orange
juice bottle



Cup

Amount in a
Small Coke
can



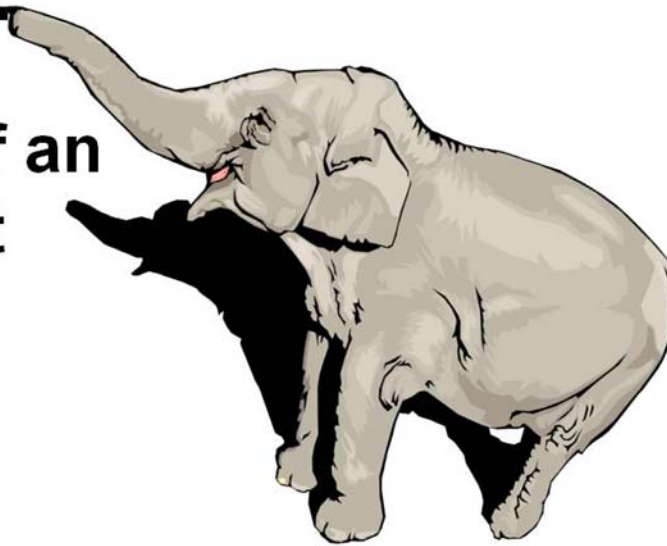
Ounce (oz.)

Amount in a
Medicine cup



Ton

**Weight of an
Elephant**



Pound (lb)

**Weight of a
bag of beans**



Mile

Distance from
school to
Kroger



Ounce (oz)

Weight of
bag of chips

