Library Newsletter No. 5

Dear Readers,

Welcome to Library Newsletter Number Five… where has the time gone? There has been a great response to the library competition and the monthly library competition too! Results of both competitions will be announced by Mr. O'Donnell in assembly. Thank you to all the children who participated and '*Congratulations*' to those who win. Well done!

Only 7 more sleeps! HO! HO! HO!

This week the newsletter reveals the Books Celebrating Christmas Around the World, with some fantastic recommendations for the season.

There will also be a brief discussion on the emotional development of a child and the effect of their belief in Santa Claus himself.

Author of the Fortnight is Jeff Norton, he is an award-winning author, writer-producer, and creator - founder of the creative incubator, *Awesome*. An all-media production company focused on creating amazing stories with compelling characters in immersive worlds.

The mathematics section analyses ALGEBRA, its history and importance in education today, while the Grammar section has a look at VERBS and tenses… how many tenses are there exactly?

Thank you very much to Stephen Woulfe, 4th Class, for the donation of "*Awesome Facts*" to the library. As before, all donations are greatly accepted and welcomed.

Merry Christmas and good reading to you all, Deirdre.

MATH WORLD - ALGEBRA

The history of algebra goes way back in time (more than 4000 years) but its importance is unparalleled by any other branch of mathematics.

Everyone knows that Albert Einstein was one of the greatest scientists ever to have lived. Well, a few people might know that the history of algebra played a key role in many of Einstein's great mathematical theories.

Nobody can advance to higher mathematics without mastering the basics of algebra. It is the fundamental language of math that actually allows you to "do" anything. The history of algebra is split into two basic kinds of algebra. One is called *Classical Algebra* (finding unknown numbers) and another is called Modern, or *Abstract Algebra* (studying rings, fields-space & time).

Classical algebra was first developed by the ancient Babylonians, who had a system similar to our algebra. They were able to solve for unknown quantities (variables) and had formulas and equations. This may seem elementary, but many advanced civilisations solved such problems geometrically because it was more visual. This is similar to the idea of graphing two linear equations to see where they intersect rather than directly solving for the solution. The Chinese began to publish their algebra writings around 100 BC.

Modern Algebra has come into existence much more recently, emerging over the past 200 years. This is a very complicated study of abstract ideas that are useful for mathematicians and scientists. It also includes some more basic topics like Boolean algebra and matrix multiplication. Modern day physics and quantum physics rely heavily on the new concepts of modern, or abstract, algebra.

Arab scholar al-Khwarizmi's book on algebra was such a hit in medieval Europe, that his name came to be used for any general set of rules for solving a maths problem. In English, it gave us the word algorithm.

An algorithm is a set of instructions that gives a specific result. The term is often used in computer programming, but it can describe any set of instructions, for instance the steps needed to fold paper into a plane.

Algebra (from Arabic *"al-jabr"* meaning "reunion of broken parts"[1]) is one of the broad parts of mathematics, together with number theory, geometry and analysis. In its most general form, algebra is

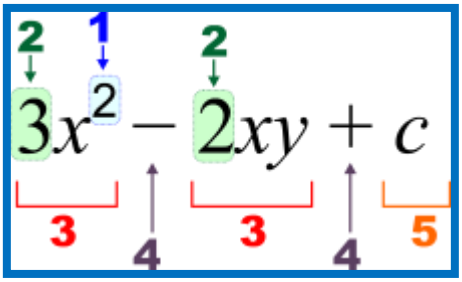
the study of mathematical symbols and the rules for manipulating these symbols; it is a unifying thread of almost all of mathematics. As such, it includes everything from elementary equation solving to the study of abstractions such as groups, rings, and fields. Elementary algebra is generally considered to be essential for any study of mathematics, science, or engineering, as well as such applications as medicine and economics. Abstract algebra is a major area in advanced mathematics, studied primarily by professional mathematicians.

Much early work in algebra, as the Arabic origin of its name suggests, was done in the Near East, by mathematicians such as al-Khwārizmī (780 – 850) and Omar Khayyam (1048–1131). Elementary algebra differs from arithmetic in the use of abstractions, such as using letters to stand for numbers that are either unknown or allowed to take on many values. For example, in $x + 2 = 5$ the letter x is unknown, but the law of inverses can be used to discover its value: $x = 3$. In $E = mc^2$, the letters E and m are variables, and the letter c is a constant. Algebra gives methods for solving equations and expressing formulas that are much easier than the older method of writing everything out in words.

The word *algebra* is also used in certain specialised ways. A special kind of mathematical object in abstract algebra is called an "algebra", and the word is used, for example, in the phrases linear algebra and algebraic topology.

A mathematician who does research in algebra is called an **algebraist**.

Elementary Algebra



Algebraic expression notation:

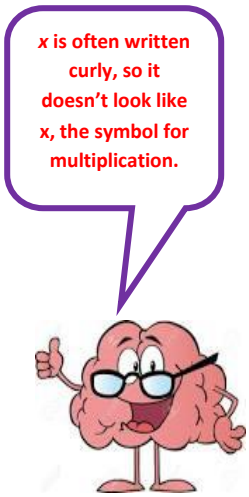
1 – power (exponent)
2 – coefficient
3 – term
4 – operator
5 – constant term
x y c – variables/constants

Elementary algebra is the most basic form of algebra. It is taught to students who are presumed to have no knowledge of mathematics beyond the basic principles of arithmetic. In arithmetic, only

numbers and their arithmetical operations (such as +, −, ×, ÷) occur. In algebra, numbers are often represented by symbols called variables (such as a, n, x, y or z). This is useful because:

- It allows the general formulation of arithmetical laws (such as $a + b = b + a$ for all a and b), and thus is the first step to a systematic exploration of the properties of the real number system.
- It allows the reference to "unknown" numbers, the formulation of equations and the study of how to solve these. (For instance, "Find a number x such that $3x + 1 = 10$" or going a bit further "Find a number x such that $ax + b = c$". This step leads to the conclusion that it is not the nature of the specific numbers that allows us to solve it, but that of the operations involved.)
- It allows the formulation of functional relationships. (For instance, "If you sell x tickets, then your profit will be $3x - 10$ dollars, or $f(x) = 3x - 10$, where f is the function, and x is the number to which the function is applied".)

Algebra and Symbols



- (☐ x 5) ÷ 3 = 10 or (? x 5) ÷ 3 = 10 What's the missing number?
- In the questions above, the missing number is represented by the symbol ☐ or ?.
- Any symbol will do, although in algebra, you normally use a letter, often an x.
- You might write the problem above like this: (5 x x) ÷ 3 = 10.
- Much of algebra is really just about shuffling and rearranging words and numbers into much simpler, clearer statements.
- For example, imagine a threefold number increased by twelve, divided by the difference by which the square exceeds three. OR $(3x + 12) \div (x^2 - 3)$? [The answer is $x = 6$]

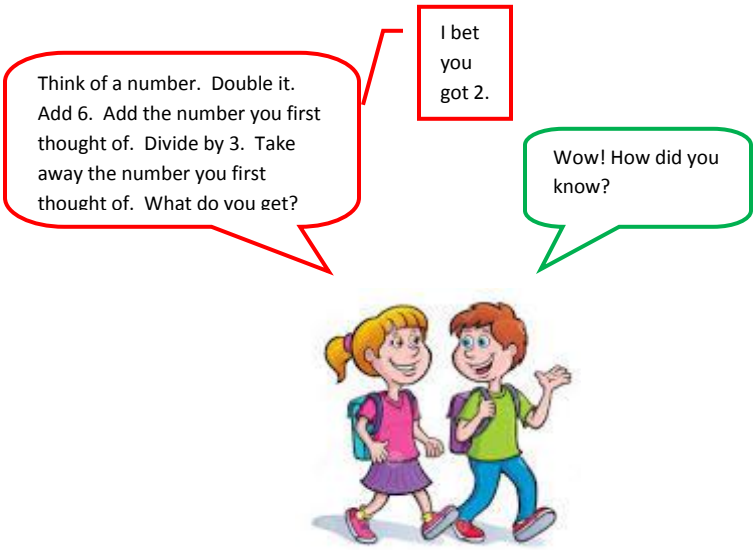
Writing Algebra

- Statements in algebra can be broken down into smaller parts, called ***terms*** and ***expressions***.
- A ***term*** is made of numbers and letters multiplied together, such as $3x$, $4y$ or $18z$.
- When terms are joined with + or -, this is called an ***expression***, such as $3x + 4y$, or $3x - 18z$.
- Some expressions are so neat and compressed that they need expanding. Here's a compressed expression: $3(x + y)$. Expanded, the expression looks like this: $3x + 3y$.

- You can substitute numbers for *x* and *y* to find out, for example, the area of a rectangle. For example: if the rectangle has a width of 3 and a length $x + y$. If $x = 5$ and $y = 6$, then: $3(x + y)$ becomes 3 x (5 + 6) = 3 x 11 or (3 x 5) + (3 x 6) = 15 + 18. Either way, the answer is 33.
- Tidying up: long sentences in algebra can take up lots of space. But there are ways to tidy them up. For example, 3 x *n* becomes 3*n*, *l* x *w* x *h* becomes *lwh*. Another handy tip is to group quantities of the same letter together. (Two symbols together means they are multiplied). For example, $3a + 4a – 2a$ becomes $5a$, 3 x *a* x 4 x *b* becomes $12ab$.

Simple Substitution

Lots of maths problems can be solved using a formula. Take this playground game for example.



No matter what number you start with, the answer is always 2. But how does this work? Algebra has the answer. This is what happens when you follow the instructions:

1. Think of a number: n
2. Double it: 2n
3. Add 6: 2n + 6
4. Add the first number (n): 3n + 6
5. Divide by 3: (3n + 6) ÷ 3 = n + 2
6. Take away the first number (n): n + 2 – n = 2
7. All that is left is 2, no matter what number n is.

So if the children are using algebra for playground games, should we be teaching them this math in primary school?

Celebrity Number

In 1637, French mathematician René Descartes wrote a book on arithmetic, including algebra. He picked the letters x, y and z to represent unknown quantities. The story goes that Descartes' printer had lots of spare xs, so he asked Descartes if he could use x more often than y or z.

Algebra and Primary School Children – Should it be taught to this age group?

The familiar, hierarchical sequence of math instruction starts with counting, followed by addition and subtraction, then multiplication and division. The computational set expands to include bigger and bigger numbers, and at some point, fractions enter the picture, too. Then in early adolescence, students are introduced to patterns of numbers and letters, in the entirely new subject of algebra. A minority of students then wind their way through geometry, trigonometry and, finally, calculus, which is considered the pinnacle of secondary-school-level math.

But this progression actually "has nothing to do with how people think, how children grow and learn, or how mathematics is built," says pioneering math educator and American curriculum designer Maria Droujkova. She echoes a number of voices from around the world that want to revolutionise the way math is taught, bringing it more in line with these principles.

The current sequence is merely an entrenched historical accident that strips much of the fun out of what she describes as the "playful universe" of mathematics, with its more than 60 top-level disciplines, and its manifestations in everything from weaving to building, nature, music and art. Worse, the standard curriculum starts with arithmetic, which Droujkova says is much harder for young children than playful activities based on supposedly more advanced fields of mathematics.

"*Calculations kids are forced to do are often so developmentally inappropriate, the experience amounts to torture*," she says. They also miss the essential point - that mathematics is fundamentally about patterns and structures, rather than "*little manipulations of numbers*," as she puts it. It's akin to budding filmmakers learning first about costumes, lighting and other technical aspects, rather than about crafting meaningful stories.

This turns many children off to math from an early age. It also prevents many others from learning math as efficiently or deeply as they might otherwise. Droujkova and her colleagues have noticed that most of the adults they meet have "*math grief stories*," as she describes them. They recall how a single course - or even a single topic, such as fractions - derailed them from the sequential track. She herself has watched more than a few grown-ups "*burst out crying during interviews, reliving the anxieties and lost hopes of their young selves*."

Droujkova, who earned her PhD in math education in the United States after

immigrating here from Ukraine, advocates a more holistic approach she calls "*natural math,"* which she teaches to children as young as toddlers, and their parents. This approach, covered in the book she co-authored with Yelena McManaman, "Moebius Noodles: Adventurous math for the playground crowd," hinges on harnessing students' powerful and surprisingly productive instincts for playful exploration to guide them on a personal journey through the subject. Says Droujkova: "Studies [e.g., this one, and many others referenced in this symposium] have shown that games or free play are efficient ways for children to learn, and they enjoy them. They also lead the way into the more structured and even more creative work of noticing, remixing and building mathematical patterns."

The First Symbol

One of the first mathematicians to use a symbol to represent unknown numbers was Diophantus of Alexandria in the 3rd century. Diophantus used the symbol: ς

Finding an appropriate path hinges on appreciating an often-overlooked fact - that "*the complexity of the idea and the difficulty of doing it are separate, independent dimensions,"* she says. "*Unfortunately a lot of what little children are offered is simple but hard - primitive ideas that are hard for humans to implement*," because they readily tax the limits of working memory, attention, precision and other cognitive functions. Examples of activities that fall into the "*simple but hard*" quadrant: Building a trench with a spoon (a military punishment that involves many small, repetitive tasks, akin to doing 100 two-digit addition problems on a typical worksheet, as Droujkova points out), or memorising multiplication tables as individual facts rather than patterns.

Far better, she says, to start by creating rich and social mathematical experiences that are complex (allowing them to be taken in many different directions) yet easy (making them conducive to immediate play). Activities that fall into this quadrant: building a house with LEGO blocks, doing origami or snowflake cut-outs, or using a pretend "function box" that transforms objects (and can also be used in combination with a second machine to compose functions, or backwards to invert a function, and so on).

"*You can take any branch of mathematics and find things that are both complex and easy in it*," Droujkova says. "*My quest, with several colleagues around the world, is to take the treasure of mathematics and find the accessible ways into all of it*." She started with algebra and calculus, because they're "*pattern-drafter tools, designer tools, maker tools - they support cool free play."* So "Moebius Noodles" includes activities such as making fractals (to foster an appreciation of the ideas of recursion

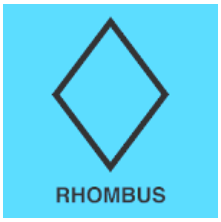
and infinitesimals) and "mirror books" (mirrors that are taped to each other like the covers of a book and can be angled in different ways around an object to introduce the concepts of infinity and transformations). (Another book in this genre is "Calculus by and for Young People," by Don Cohen.)

"*It's not the subject of calculus as formally taught in college*," Droujkova notes. "*But before we get there, we want to have hands-on, grounded, metaphoric play. At the free play level, you are learning in a very fundamental way - you really own your concept, mentally, physically, emotionally, culturally.*" This approach *"gives you deep roots, so the canopy of the high abstraction does not wither. What is learned without play is qualitatively different. It helps with test taking and mundane exercises, but it does nothing for logical thinking and problem solving. These things are separate, and you can't get here from there*."

She doesn't expect children to be able to solve formal equations at age five, but that's okay. "*There are levels of understanding*," she says. "*You don't want to shackle people into a formal understanding too early*." After the informal level comes the level where students discuss ideas and notice patterns. Then comes the formal level, where students can use abstract words, graphs, and formulas. But ideally, a playful aspect is retained along the entire journey. "*This is what mathematicians do - they play with abstract ideas, but they still play.*"

Droujkova notes that natural math - whose slogan is "*make math your own, to make your own math*" - is essentially a "*freedom movement*." She explains: "*We work toward freedom at many levels - the free play of little kids, the agency of families and local groups in organising math activities, the autonomy of artists and makers, and even liberty for us curriculum designers. ... No single piece of mathematics is right for everyone. People are different, and people need to approach mathematics differently*."

For example, in a group learning about the properties of rhombuses, an artistically inclined person might prefer to draw a rhombus, a programmer might code one, a philosopher might discuss the essence of rhombi, and an origami master might fold a paper rhombus.



Nor does everyone need to learn any particular piece of mathematics, aside from what's essential to function in his or her culture. Many people live to a ripe and happy old age without knowing calculus, for example. "*At the same time, the world would be better off with a higher literacy for mathematics,*

and humanity as a whole needs advanced math to make it through the next 100 years, because there are pretty complex problems we're facing."

Children need to be exposed to a variety of math styles to find the one that suits them best. But they also need to see meaningful (to them) people doing meaningful things with math and enjoying the experience. Math circles, where people help one another, are growing fast and are one way to achieve this. Math know-how (activities and examples) "*must come with communities of practice that help newbies make sense of it*," Droujkova says. "One does not work without the other."

Regardless, if learning is to be as efficient and deep as possible, it's essential that it be done freely. That means giving children a voice in which activities to participate, for how long, and also the level of mastery they want to achieve. ("This is the biggest clash with traditional curriculum development," Droujkova notes.)

Adults must be prepared for those times when a child would rather be doing something other than the planned activity. Says Droujkova: "The role of adults is to inspire, by saying things like, '*Ooh, what a complex shape - have you noticed the curve is made out of straight lines?*' Provide math connections with whatever kids are doing. This is hard to do - it requires both pedagogical and math concept knowledge, but it can be learned. And everyone can easily give general support: '*How very interesting, I will investigate more*.' You can then look online, or ask on a math circle forum, to find out what it means mathematically.

It's also helpful to have a variety of interesting materials on hand and to be okay with the idea of kids taking breaks as needed. Droujkova has noticed that in most groups, there are one or two kids do something else, while the rest do the main activity. (The non-participants still absorb a surprising amount, she adds.)

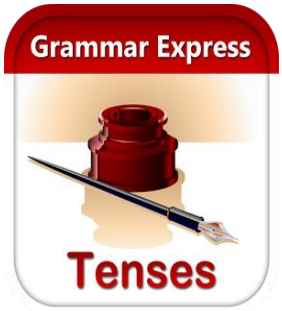
Pushback has come primarily from two very different (and usually opposing) camps. One is the "let kids be kids" cohort, which worries that legitimising the idea of involving toddlers with algebra and calculus will tempt Tiger Mom types to push their kids into formal abstractions in these subjects at ever younger ages, even though that would completely miss the point. Other critics fall into the "back to basics" camp, which contends that all this play will prevent kids from becoming fluid in traditional calculation skills.

Droujkova views these criticisms as indicative of something much bigger: "*They reflect rather deep chasms between different philosophies of education, or more broadly, differences in the futures we pave for kids. When we assign a lot of similar exercises, we picture kids in situations that require industrial precision.*" Giving children logic puzzles or open projects, on the other hand, indicates aspirations of them growing up to become explorers or designers. "*It does not work that directly*," she concedes, "*but these beliefs dictate what mathematics education the grown-ups select or make for the kids.*"

There are also some who worry about whether this approach is practical for disenfranchised populations. Droujkova says that it can be led by any "*somewhat literate*" adult; the key is to have the right support network in place. She and her colleagues are striving to empower local networks and enhance accessibility on all fronts: mathematical, cultural and financial. They have made their materials and courses open under Creative Commons, and designed activities that require only readily available materials.

"The know-how about making community-centred, open learning available to disenfranchised populations is growing," Droujkova notes, citing experiments by Sugata Mitra and Dave Eggers. Online hubs can connect like-minded community members, and online courses and support are available to parents, teachers and teenagers who want to lead local groups.

Droujkova says one of the biggest challenges has been the mindsets of the grown-ups. Parents are tempted to replay their "bad old days" of math instruction with their kids, she says. With these calculus and algebra games, though, "*parents say they get a fresh start. … They can experience the joy of mathematical play anew, like babies in a new world*."



Grammar World

"They said: "You're Laurie Lee, aren't you? Well just you sit there for the present." I sat there all day but I never got it. I ain't going back there again." ***Cider With Rosie*** by Laurie Lee

In grammar, tense is a category that expresses time reference. Tenses are usually manifested by the use of specific forms of verbs, particularly in their conjugation patterns. Basic tenses found in many languages include the past, present and future. Some languages have only two distinct tenses, such as past and non-past, or future and non-future. There are also tense-less languages, like Chinese, which do not have tense at all. On the other hand, some languages make finer tense distinctions, such as remote vs. recent past, or near vs. remote future.

Tenses generally express time relative to the moment of speaking. In some contexts, however, their meaning may be relative to a point in the past or future which is established in the discourse (the moment being spoken about). This is called ***relative*** (as opposed to ***absolute***) tense. Some languages have different verb forms or constructions which manifest relative tense, such as ***pluperfect*** ("past-in-the-past") and "future-in-the-past".

Expressions of tense are often closely connected with expressions of the category of aspect; sometimes what are traditionally called tenses (in languages such as Latin) may in modern analysis be regarded as combinations of tense with aspect. Verbs are also often conjugated for mood, and since in many cases the three categories are not manifested separately, some languages may be described in terms of a combined **tense–aspect–mood** (TAM) **system**.

It's all about time. Things can happen now, in the future or in the past. The tenses simply show the time of an action or state of being as shown by a verb. The verb ending is changed (conjugated) to show what time it is referring to. Time can be split into three main periods The Present (what you are doing), The Past (what you did) and The Future (what you are going to do, or hope / plan to do).

Exactly how many tenses there are in English is arguable. Some grammarians claim that there are only two: the present and the past. (Presumably they let the future take care of itself.) Some say the traditional number is twelve, though others have described as many as thirty and, just to confuse us, some tense have more than one name. But here are fourteen that should get you through most situations (or ballet positions).

Present simple	I pirouette
Present continuous	I am pirouetting
Present perfect	I have pirouetted
Present perfect continuous	I have been pirouetting
Past simple (also known as preterite)	I did pirouette, I pirouetted
Imperfect	I used to pirouette
Past continuous	I was pirouetting
Conditional	I would pirouette
Pluperfect/past perfect	I had pirouetted
Past perfect continuous	I had been pirouetting
Future	I will pirouette
Future perfect	I will have pirouetted
Future continuous	I will be pirouetting
Future perfect continuous	I will have been pirouetting

Famous Last Words

'I am about to – or I am going to – die. Either expression is correct.'

French Grammarian Dominique Bouhours, who died in 1702.

Back to the Future

In the future tense, shall refers to the first person, will to the second and third. So: I shall be at home tonight. Will you come round?

But if you want to be emphatic, reverse the trend:

I will be ready on time, I promise.

I don't care what your wicked stepmother says: you shall go to the ball.

I shall drown, no one will save me! (In other words, I should like to be saved but everyone is ignoring me.

I will drown, no one shall save me! (In other words, I am determined to drown; I forbid anyone to throw me a life belt.)

Judging By Your Mood

Verbs, like the rest of us, act differently depending on which mood they are in. There are three moods: indicative, imperative and subjunctive.

The ***indicative*** mood makes a statement or asks a question: *I'm wet, I'm cold and I'm hungry. Winter is almost here. He will come. Is that the best you can do?*

The ***imperative*** mood gives us a command: *Chill out! Do as I say! Don't eat the daisies!* And even more politely phrased: *Please look after this bear.*

Unfortunately the subjunctive mood is so complicated that it deserves a subheading of its own.

The Subjunctive Mood

The subjunctive sounds scarier than it is, and has a tendency to fill people with horror. For example:

*I wish it **weren't** going to snow again* (but it is).

*If it **were** to snow* (which it may or may not do, we don't know yet), *they would not be able to get home.*

I were or *it were* may sound odd, but they're right when you are using the subjunctive.

Rule: if you know something for a fact use *was*. If something is contrary to fact, or if you are imagining a future or different situation to the one you are in, use *were*.

*When I **was** young* (fact: I *was* young once) *I was taught Latin* (it's true, **I** *was* taught Latin).

*When he **was** young hand handsome* (he *was* young and handsome once) *he was also arrogant.*

*I **was** that man* (you *were* indeed).

*When I **was** poor* (I once *was* indeed poor), *I wasn't unhappy.*

but

*If **I were** you* (but I'm not), *I should teach myself Latin.*

*If **I were** to teach you Latin* (supposing that I taught you Latin*), would you study hard?*

*If **I were** to be young and handsome again* (but I can't be, alas), *I wouldn't be so arrogant about it.*

*If **I** were that sort of man (*but I'm not).

*If **I** were rich* (but I might never be rich*), would I be happier than I am now?*

*I wish **I were** taller* (but I am currently stuck at this height).

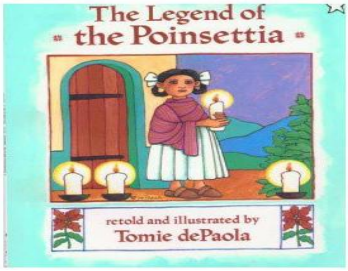
Rattigan (child genius): 'If only that was possible.'

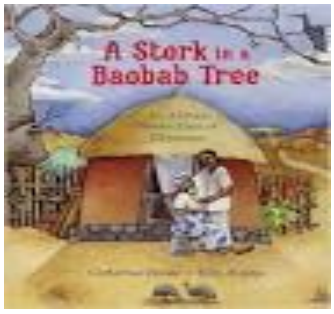
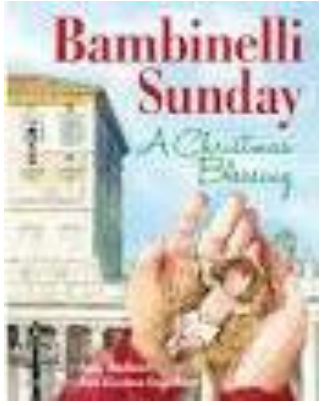
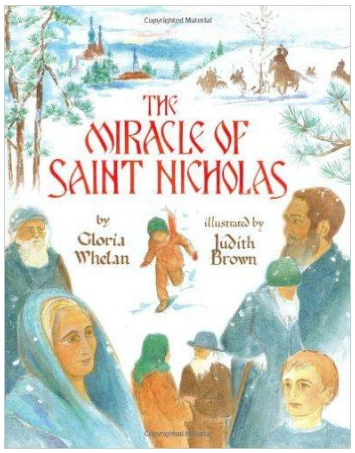
The Doctor: 'If only that ***were*** possible. Conditional clause.'

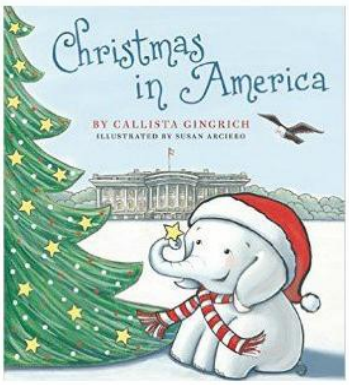
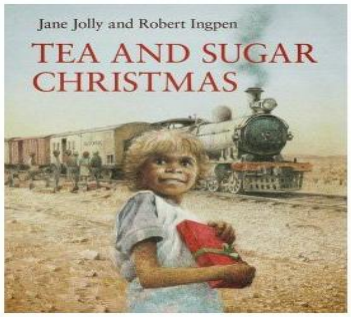
Doctor Who: the Sontaran Stratagem

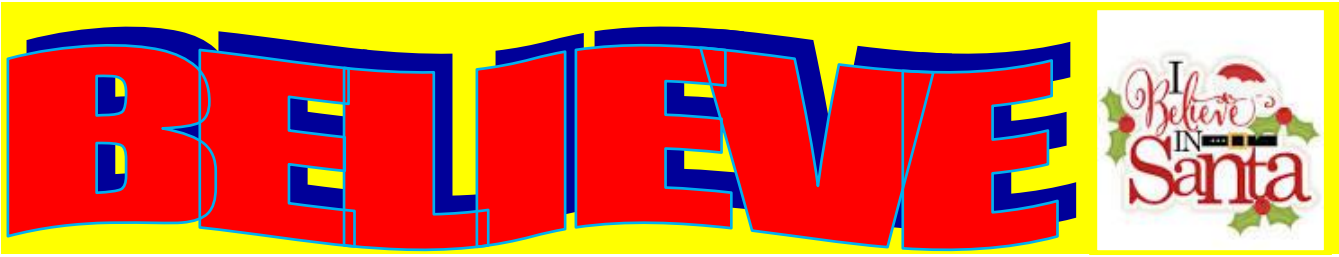
Books Celebrating CHRISTMAS Around the World

Did you know that over 2 billion people around the world celebrate Christmas? If you were to scan my book collection of holiday books, you would notice that the biggest section is Christmas books. But, one thing my shelf is lacking is diversity. This year, I'm making a point to add books to my shelf that show how countries around the world celebrate Christmas. Journey along with me.

 **Mexico**	**The Legend of the Poinsettia by Tomie dePaola** The Legend of the Poinsettia is a Mexican legend that tells how the poinsettia came to be the flower of the Holy Night. Tomie dePaola is a master storyteller and the illustrations in the book are beautiful.
 **Sweden**	**Hanna's Christmas by Melissa Peterson** Hanna's family recently moved to America and she is not happy about the move. She misses her home in Sweden with her Mormor, the farm and life in general. Then, a box from her Mormor arrives and inside she discovers lots of Christmas goodies and a tomten who had mistakenly been placed inside the box. Tomtens are magical creatures who live on farms and help with chores. They say that if a tomten is happy, then he will bring you good luck. Will this tomten bring Hanna good luck? Learn about Swedish customs in this sweet story.

 **Africa**	**A Stork in a Baobab Tree: An African 12 Days of Christmas by Catherine House** A Stork in a Baobab Tree is set to the tune of the 12 Days of Christmas. We are swooped away to an African village and introduced to thatched roofs, grazing goats and a Baobab tree.
 **Italy**	**Bambinelli Sunday: A Christmas Blessing by Amy Welborn** Alessandro watches his grandfather and thinks about his parents who are away. His grandparents suggest he make a Bambino for Bambinelli Sunday in Rome. This is a tradition that takes place on the third Sunday of Advent. Children come to St. Peter's Square where the Holy Father blesses them. The children then return the babies to their manger scenes.
 **Russia**	**The Miracle of St. Nicholas by Gloria Whelan** It was the day before Christmas in a small Russian village. Alexi's babushka was telling him what Christmas was like when she was a girl-before the soldiers came. "Our church was as crowded as a pod full of peas. Candles made the church as bright as the sunniest day. Watching over us was the blessed icon of St. Nicholas." Alexi had many questions, including, "Why can't we celebrate Christmas tomorrow in St. Nicholas?" Babushka sadly replied that it would take a miracle after sixty years. Well, Alexi had heard enough. If there truly was such a thing as a miracle, why couldn't it happen here? And so unfolds a story that poignantly reveals how, though quiet and hidden, faith and hope cannot be suppressed-by soldiers or by time.

 **United States**	**Christmas in America by Callista Gingrich** Ellis the Elephant is back! In *Christmas in America*, the fifth in Callista Gingrich's *New York Times* bestselling series, Ellis discovers the meaning of Christmas and learns how this special holiday has been celebrated throughout American history. In preceding books, including *Sweet Land of Liberty*, *Land of the Pilgrims' Pride*, *Yankee Doodle Dandy*, and *From Sea to Shining Sea*, Ellis learns about the pivotal moments that have shaped our nation. Now, in Christmas in America, this adorable pachyderm explores the tales and traditions that have made Christmas a cherished part of the American experience.
 **Australia**	**Tea and Sugar Christmas by Jane Jolly** The Trans-Australian Railway train would travel across the Nullarbor Plain delivering goods and services to the people. Once a year, Santa would travel along delivering gifts to the children. The book provides not only a look at Australian history, but is also a heart-warming story.



EMOTIONAL DEVELOPMENT IN A CHILD AND SANTA CLAUS

According to Charles Smith, a Kansas State University expert in child development it is very important to continue to believe in Santa Claus. Father Christmas is key to a child's developing imagination, Smith said. "Santa Claus is a shared cultural image of benevolence and kindness and you don't want to undermine that," he said. "With Santa Claus, you are trying to enrich the child's life by sharing something that you both enjoy," he said. "Santa Claus embodies the whole idea of the Christmas season as the time of caring, togetherness and magic."

Smith said that a child's belief in Santa Claus enables the child to develop a sense of wonder about the jolly character and use their imagination. Using their imagination to consider the possibilities is key to problem solving and other mental tasks down the line, he said. "Santa Claus is a loving, merry person who cares about kids so much that he wants to bring toys to kids throughout the whole world," Smith said. "If you take Santa Claus out of the picture, you diminish that child's sense that they are special. "Santa is a shared cultural commitment to kids, to bring happiness into children's lives," he said.

Above all, parents should respect their child's imagination and let them take the lead when it comes to the level of belief, Smith said. Most children will ask pointed questions about the man in red who flies around the globe delivering toys to all the world's children in a single night. Smith said it is important not to overexplain. "Be honest when children initiate a question," Smith said. "If a child asks if Santa is real, you tell the truth and say that Santa is a wonderful person who wants to bring happiness to children." Smith also said that using Santa Claus as a disciplinary measure or threat sends mixed messages. "Santa Claus would not refuse to come to your child's house if she didn't eat all of her green beans," Smith said. "Telling a child that Santa would do that undermines a shared enjoyment of Santa Claus.

"Santa Claus is a shared magic that brings families together. When you respect and are responsive to the child's imagination, you build happy memories to last a lifetime, Smith said. "That's why that sense of joyfulness that surrounds Santa Claus is so important. It's a cold, hard world for a child who can't have that kind of pleasure."

Author of the Fortnight

Jeff Norton

Jeff Norton is award-winning author, writer-producer, and creator - founder of the creative incubator, *Awesome*. Jeff's first series is 'MetaWars' (Hachette), a high-tech thriller saga about the fight for the internet. His new book is the tween comedy 'Memoirs of a Neurotic Zombie' (Faber) about a twelve-year old-boy with OCD who rises from the grave to solve his own murder. Jeff has just completed his first picture book 'Stomp School' (MadeInMe / Little Tiger Press), about the children of the world's city-stomping kaiju monsters. Through *Awesome*, Jeff is the creator and co-writer of the best-selling 'Princess Ponies' books (Bloomsbury) by "Chloe Ryder" for younger readers, the YA novel 'Drummer Girl' (Bonnier) by Bridget Tyler. Awesome has a thorough development slate for both children's and now adult audiences and works closely with major, international publishers to bring its stories to readers around the world.

Jeff is currently an Executive Producer on 'Trucktown' for Nelvana/Treehouse (Corus), based on the best-selling books by Jon Scieszka. Jeff developed and produced the award winning 'Choose Your Own Adventure' interactive movie starring William H. Macy, Frankie Muniz, and Felicity Huffman, based on the books. Before embarking on his own creativity, Jeff was Senior Vice President of Chorion Ltd., which managed the literary estates of Enid Blyton and Agatha Christie. He also acquired new intellectual property (the award-winning Octonauts, master of horror Dennis Wheatley), created the popular 'Skate School' book series (Usborne), and was Executive Producer of the German-language film 'Hanni und Nanni' (Universal). Jeff previously consulted to The Jim Henson Company and after starting his entertainment career interning at ICM and Warner Bros.

Before entering the entertainment industry, Jeff was a marketing executive at Procter & Gamble where he launched new businesses (Febreze and Dryel), ran the marketing campaign for P&G's $500 million dishwashing business, and launched the ongoing partnership with the U.S. Fund For UNICEF. Jeff studied Film Studies and Commerce at Queen's University, Canada, and holds an MBA from Harvard Business School. He is a speaker at events such as The Children's Media Conference, London Book Fair, C21, Power to the Pixel, The Bookseller conferences, and various literary festivals.

Originally from Canada, Jeff moved to London from Los Angeles where he now lives with his wife and his two delightful (though sleep-depriving) young sons. When he's not writing, Jeff spends time with his young family, runs on Hampstead Heath, and tweets as @thejeffnorton. On the web at: www.jeffnorton.com

I love writing and creating for books. I believe that the simple, low-tech book is an awesome storytelling device because it's powered by your imagination. If I do my job right, by putting black words in the right order on a white page, you bring my characters, stories, and worlds to life using the most powerful graphics processor ever created…your brain!

METAWARS available in St. Patrick's National School Library