Math Immersion

Ten Steps to Math Fluency

Harold & Renae Zentz

Harold's age… 4 years older than 9 times the age of the picture

Next year… 2 years older than 8 times the new age of the picture

Renae's age… a constant 11th prime

A little about us:

Grew up in Math Homes : $(2^4 + 2^2 \times 3) \times 2 - 6$

Numerator/Denominator : ND / TX

BYU Language Houses : German – Spanish

A foreign language isn't foreign if you speak it!

Weber School District German/Math teacher

Homeschool mom/Family Lyceum Co-Founder

Family LYCEUM

"Math is like going to the gym for your brain. It sharpens your mind." Danica McKellar

"Somehow it's O.K. for people to chuckle about not being good at math. If I said, 'I never learned to read,' they'd say I was an illiterate dolt." Neil deGrasse Tyson

"We don't know a millionth of one percent about anything." Thomas Edison

Ten Steps to Math Fluency

Immersion

Projects

Historical

Manipulatives

Symbols

Riddles

Curriculum

Read

Money

Games

Immersion

Every day

Everywhere

All around you!

Speak math…

talk about numbers,

geometric shapes,

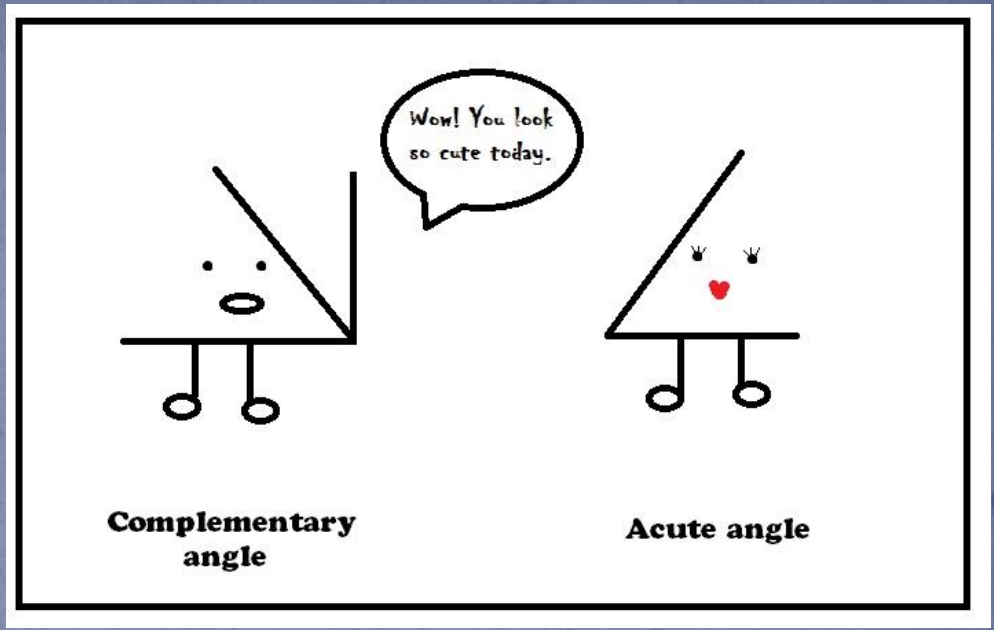
comparisons,

patterns,

Because it helps create better …

What math do Barn Owls study?

Immersion



Every day

Everywhere

All around you!

Speak math…

talk about numbers,

geometric shapes,

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patterns,

Because it helps create better **Problem Solvers!**

Owlgebra

Immersion

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problem solving, …

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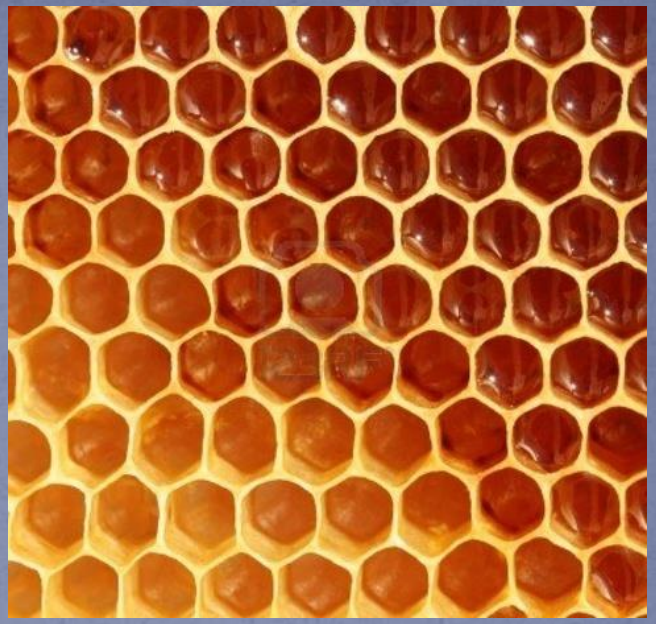

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Projects

It should apply to your students!
Be a part of their lives…

Fibonacci Sequence

"You can be creative in anything – in math, science, engineering philosophy – as much as you can in music or in painting or in dance."

Ken Robinson

Projects

It should apply to your students!
Be a part of their lives…

Fibonacci Sequence

What does a Vegan Mathematician eat?

Projects

It should apply to your students!
Be a part of their lives…

Roots, Whole numbers, natural logs, and Stem-Leaf plots.

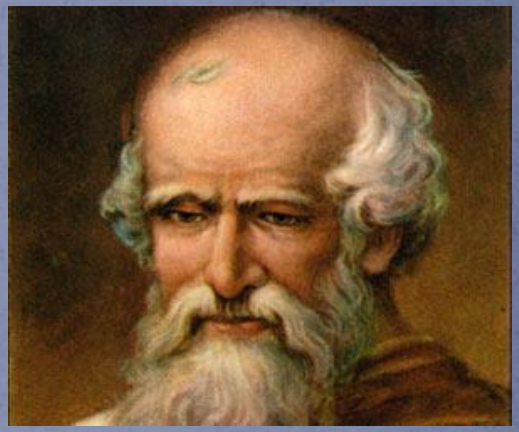
Historical Connections

Learn about people and places in history…

History is the Hook – Bonnie Jones

Mathematicians are People, Too

Historical Connections in Mathematics



Archimedes 287-212 B.C.

What did the 8 say to infinity?

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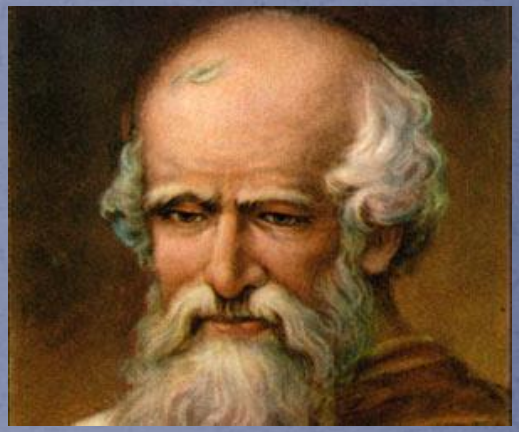
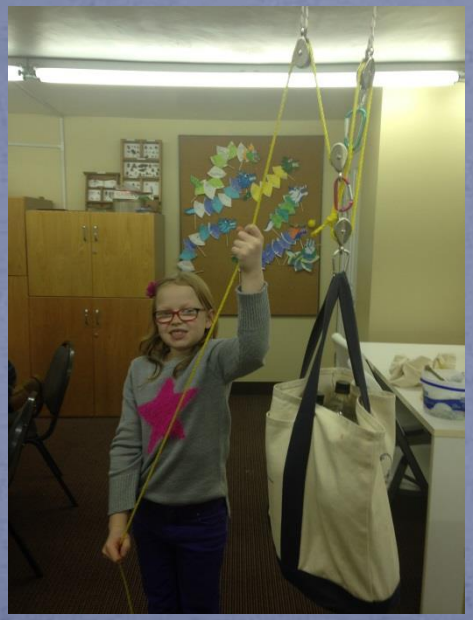
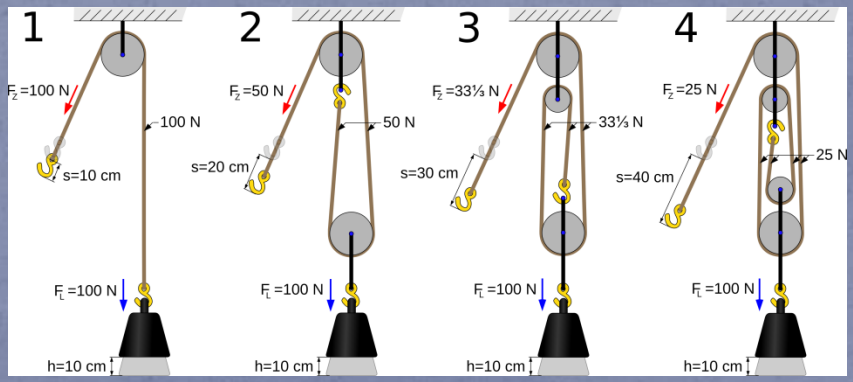
Historical Connections in Mathematics







Rise and shine, Buddy!

Use Manipulatives

Teach concrete and hands on first…

abstract comes after understanding

A base ten set is a must, but be creative!

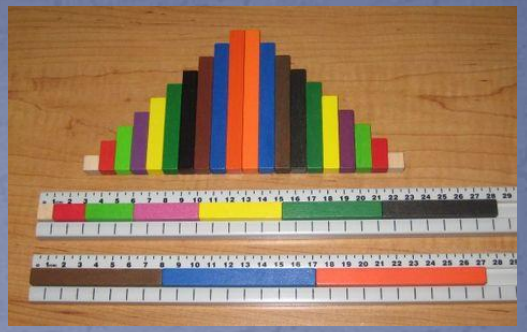
Draw it, count it, touch it,

stack it, taste it…

3D is best

When the foreign exchange student was asked, "How much is 2n + 2n?" What was his response?

Use Manipulatives



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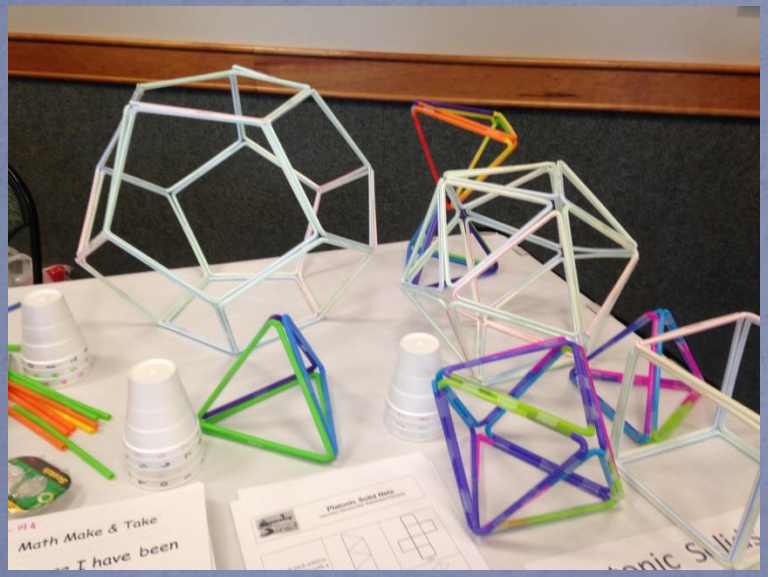
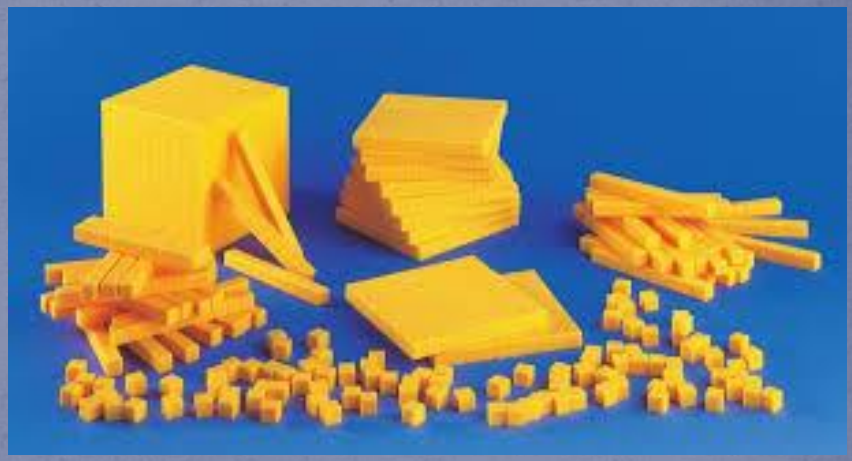


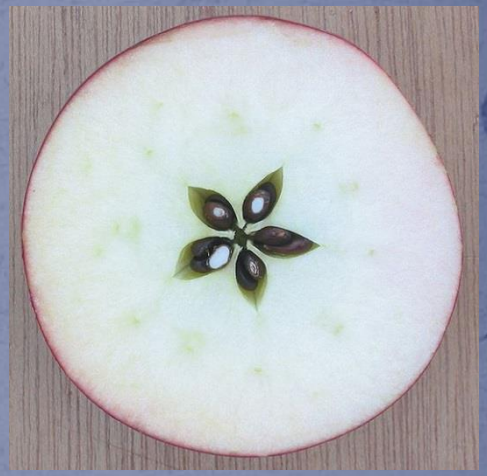


"I don't know…it's all 4n to me."

Patterns, Symbols, and Stories

Beginner's Guide to Constructing the Universe

Connect with nature…



When our calculus teacher would tell us a joke, my friend would laugh twice, once when he first heard it, then again when he got it.

Do Riddles, Tricky Problems…

Do Problems YOU don't know

Work them out together

Stay out of the answer book…

Math for Smarty Pants

us
+ as
all

Alphametrics

IQ TEST

IF A + B = 76

A - B = 38

A ÷ B = …?

Where do math teachers eat dinner?

Do Riddles, Tricky Problems…

Do Problems YOU don't know

Work them out together

Stay out of the answer book…

Math for Smarty Pants

moses
+ meets
salome

Alphametrics

At the times table.

Curriculum? Choose one…

Then love your choice!

Or choose twice… but do it <u>every</u> day.

?

Identify the 3 mistakes: "This sine contains threee errors."

Curriculum? Choose one…

Then love your choice!

Or choose twice… but do it <u>every</u> day.

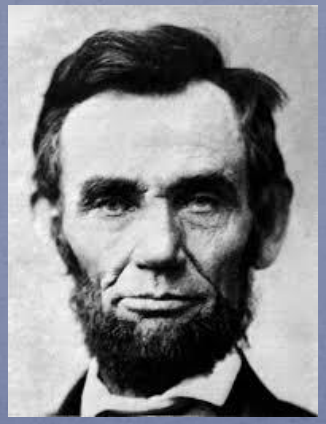
?

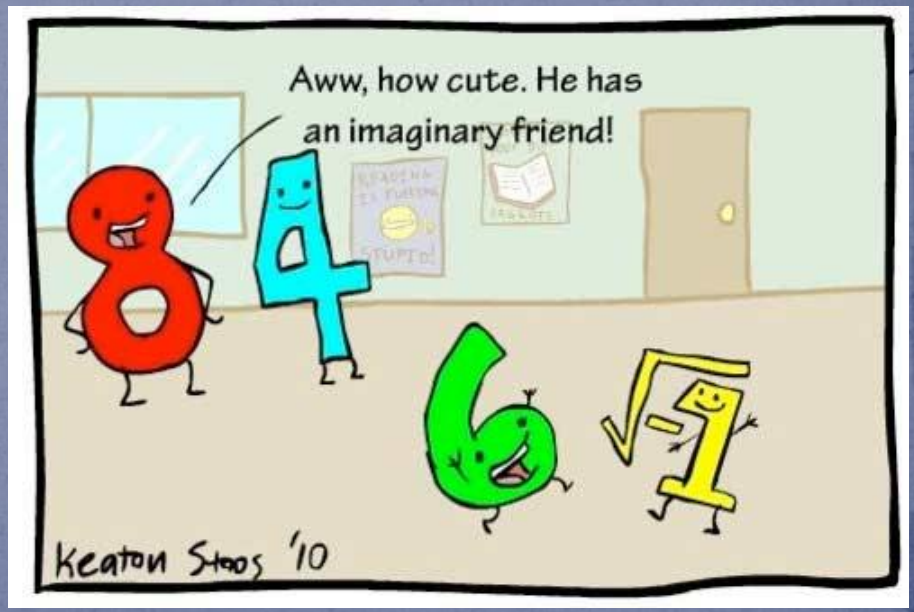
"Do not worry about your difficulties in Mathematics. I can assure you mine are still greater." Albert Einstein

Read! Then Do the math!

Core books

Merry Adventures of Robin Hood
Mathematicians are People, Too
String, Straightedge and Shadow
Carry on, Mr. Bowditch
Alice in Wonderland
Man of the Family
Fermat's Enigma
Flatland





Money

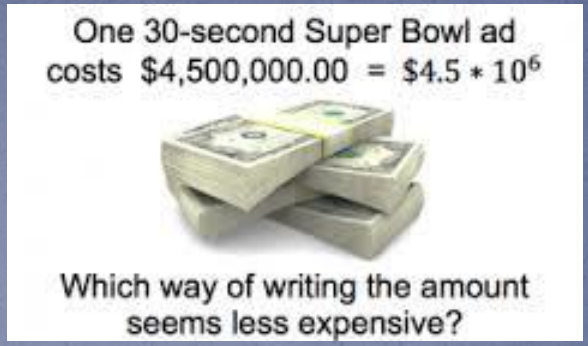
Personal income, allowance, expenses

Shopping, ads, price comparisons

Car, home, interest

Start (or pretend to) a business and do the math!

Money



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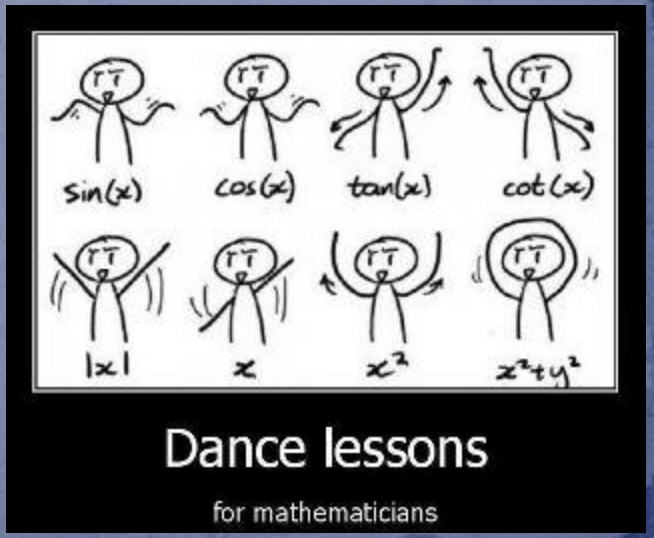

Math Games (make it fun!)

Mental exercise!

Krypto, Number Quest, Gobblet, Chess, Set, …

Math Games (make it fun!)

Mental exercise!

Krypto, Number Quest,

Gobblet, Chess, Set, …

"You know the best thing about competition? There's this whole strategy game, and when it all works out it's like solving that hard math equation. You finally get the answer and you're so happy!"

Shaun White

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MATHINSPIRATIONS

5 Powerful Math Games

5 Part Video Training

Our book
10 Things Every Parent Should Know About Math
+
What To Teach Guide
+
More...

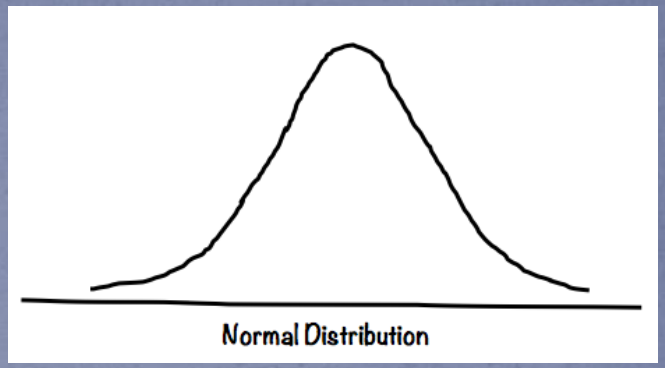
For Your FREE Starter Kit
Text *UHEAMATH* to *33444*

Also, follow us on Instagram for even more ideas, activities and games

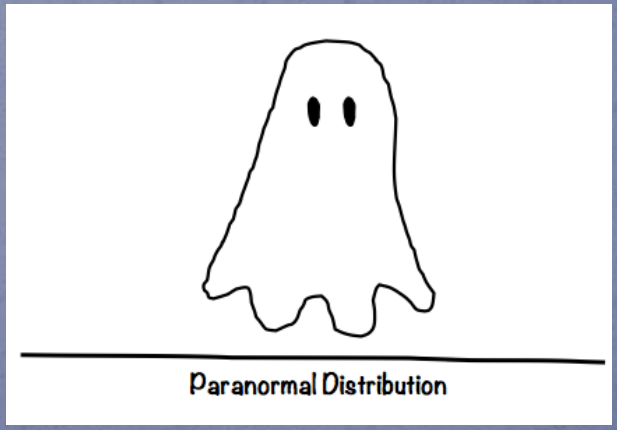
@mathinspirations

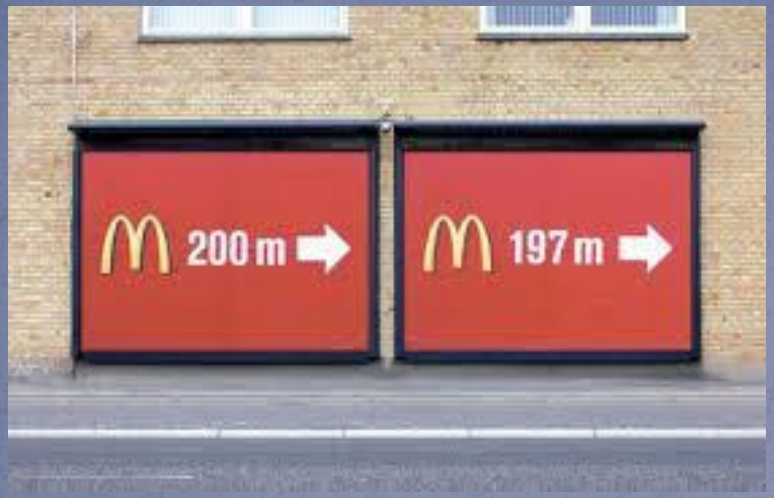
Visit mathinspirations.com for more info

MINNEAPOLIS SPENDS $21,000 PER STUDENT.
BARELY HALF GRADUATE.
NOT COOL.


Normal Distribution

health happens here
PRISON
$62,300
SCHOOL
$9,100
#DoTheMath


Paranormal Distribution


200 m
197 m

20z. OF GOLD CAN
COVER A BILLBOARD
SCIENCE WORLD
Photo: Science World Museum

get
50% off
or half price,
whichever is less.