Title of Session: Arts and Literacy - Math
Moderator: BJ Berquist
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Room: After School Online Room

BJB2: I'd like to welcome you all to this months Arts and Literacy discussion

BJB2: the topic tonight is Arts and Math

BJB2: before we begin, can you each tell me where you are located, what you teach, and what you hope to get from the discussion?

BJB2: I'm an art teacher in Pennsylvania and I'll be leading the discussion

MichaelRu: Williamsville, NY (suburb of Buffalo), Technology Integration Specialist, ideas for my Art/Math Folks

MarkWag: I teach in a self contained 4th grade class in Wichita Falls, Texas. I am here just to get any ideas and here what is going on in other places around the country.

BJB2 . o O (but I always get something from all the Tapped In discussions...the participants are as important as the discussion leader!)

LuannBa: I teach at Hamilton Christian Academy in Lake Charles, LA. I currently teach Geometry, Calculus and Computer Science (Visual Basic). I hope to get some ideas that I can use to incorporate math in other areas of the curriculum

SusanR: K to 8 Occasional Teacher from Ontario, Canada..just finished a French assignment..grade 5 tomorrow

KhristinaH: My name is Khristina and I am a preservice teacher at the University of Houston. I hope to learn how to integrate math with other subjects

MichaelRu: how do you do that wave/nod thing???

BJB2: I'm going to start the program with an introduction to Ethnomathematics

SusanR: I would like to put in a plug for K to 3+ Great Resources sessions this month ... I am the leader or facilitator

BJB2: Michael, start the line with a colon followed by the action :waves

MichaelRu: thnks

SusanR thinks

BJB2: EthnoMath integrates the math of world cultures into your math curriculum

BJB2: our first site is Mathematics of World Cultures = A World of Possibilities

BJB2: http://www.enc.org/features/focus/archive/mathroots1/document.shtm?input=FOC-003606-index

BJB2 . o O (remember to hold the ctrl key down as you click)

BJB2: if I'm going to fast or you aren't able to bookmark all the sites, they will be included in your transcript. I'll give you a master site at the end of the session

BJB2: any questions or comments on this site?

LindsayGst3 joined the room.

BJB2: I have several sites related to ethnomath

BJB2: the next one is from ENC

BJB2: ENC Teaching Mathematics of World Cultures

KhristinaH: it seems to have a lot of info

BJB2: http://www.enc.org/features/focus/archive/mathroots2/

BJB2: hi, Lindsay. Welcome

LindsayGst3: Hi, everyone!

KhristinaH: do you have to pay to use this site

BJB2: Lindsay, click on the url to open a new window

BJB2: to use which site, Khristina?

KhristinaH: ENC

BJB2: no

KhristinaH: okay thanks

LindsayGst3: okay

BJB2: ENC and Math Forum are great resources for all kinds of math ideas.

KhristinaH: I love the pictures for symmetry

LuannBa: Are there many ideas for higher level math courses?

KhristinaH: They are a great way to expose children to different cultures, as well as keep them engaged

SusanR . o O (notes the symmetry in her Turkish rug in the family room beside the computer)

BJB2: the next site is a coloring book...Coloring Booklet Series about the Arts of Central Eurasia with Rich Heritage of Ethnomathematical Ornamental Arts

BJB2: Luann, I think you'll find all levels, not only in the sites I'm showing tonight, but in the ENC and Math Forum sites

BJB2: this is a pdf file

BJB2: http://www.ethnomath.org/resources/coloring-booklet.pdf

KhristinaH: very cool

BJB2: the next ethno math site is Native American Geometry

LuannBa: These are great examples for geometry classes.

BJB2: http://www.earthmeasure.com/

MichaelRu: there are some pretty neat samples in there

MarkWag: The art is a great alternative to the traditional symmetry activities.

BJB2 nods to Mark

KhristinaH agrees

BJB2: it also reaches those struggling learners whose strength is visual

BJB2: the next site is the Ethnomath Digital Library

LuannBa: One idea I have used is to have them use symmetrical triangles to make quilt blocks. They had fun and realized the different designs that could be made.

MarkWag: It would be a great segue to Aztec and Mayan visuals to connect to the large number of Hispanic students I have from Mexico.

BJB2: http://www.ethnomath.org/index.asp

BJB2: the next site explains a bit about using ethnomath to teach minorities

BJB2: An Ethnomathematics Approach to Teaching Language Minority Students

BJB2: http://jan.ucc.nau.edu/~jar/NALI11.html

BJB2: Ethnomathematics must be understood in terms, not only of the traditional native culture, but also of its emerging identity, one that lives side by side with the mainstream culture. In this sense, an ethnomathematics approach to the curriculum will draw on traditional culture while focusing attention on the mathematics needed by these students in an integrated society.

BJB2: ready to continue?

MichaelRu: This topic (ethnomathematics) is new to me - I know it could help "freshen" the content my math folks are teaching, and be an awesome focus for ELLs

KhristinaH: yes

BJB2: exactly, Michael

BJB2: this next site is fun

BJB2: Games from the Aboriginal People of North America

BJB2: http://mathcentral.uregina.ca/RR/database/RR.09.00/treptau1/

MarkWag: I employ a dual language approach with my students. Many are strong at math. I use their math strengths to help develop language skills.

BJB2: excellent, Mark

BJB2: Sacred Math is next...

BJB2: http://www.intent.com/sg/

BJB2: Sue, this one is for you and your oriental carpet

BJB2: Symmetry and Pattern: The Art of Oriental Carpets

BJB2: http://mathforum.org/geometry/rugs/

SusanR: Thank you. Bj..

MarkWag: Making up math games would be great for my students. They could use anything from around the class, playground, or at home. It is also something they could do with their parents.

KhristinaH: I think having real life examples only enhance learning

BJB2: Is anyone familiar with the Fibonacci Sequence?

MarkWag: no

LuannBa: yes, it's found in a lot of nature and buildings, etc.

BJB2: Fibonacci Numbers and The Golden Section in Art, Architecture and Music

KhristinaH: no

SusanR: Children are fascinated by symmetry and love noticing it in everyday objects

BJB2 nods to Luann

MichaelRu: the little ones are ganging up on mommy - sorry but I must take my leave - looking forward to using the resources!

BJB2: http://www.mcs.surrey.ac.uk/Personal/R.Knott/Fibonacci/fibInArt.html

RobinLe joined the room.

BJB2: hi, Robin. Are you here for the Math and Arts discussion?

RobinLe: yes, I was kind of just looking around as well

KhristinaH: I love how all of these sites are easy to navigate

BJB2: you're welcome to join us.

RobinLe: thanks

MichaelRu left the room (signed off).

BJB2: this next site is just fun to look at

KhristinaH: great

BJB2: Fibonacci Spirals

BJB2: http://www.moonstar.com/~nedmay/chromat/fibonaci.htm

LuannBa: My students just did reports on the Golden Ratio. They didn't realize how it was used in buildings and everyday things.

KhristinaH: AWESOME!

BJB2: I hope they enjoyed the lesson, Luann!

BJB2: Fibonacci Numbers-A rich Fibonacci Number and Golden Ratio site

LuannBa: I'm dating myself but these look like the old Spirograph pictures I used to make as a kid.

BJB2: this is the home site that explains a bit about Fibonacci Numbers

MarkWag: Interesting to look at, seem over my students' and my head. Good visuals, though.

BJB2 laughs...I agree, Luann

BJB2: http://www.mcs.surrey.ac.uk/Personal/R.Knott/Fibonacci/fib.html

LuannBa: Many of these can also be made by using Geometer's Sketchpad.

SusanR: memories of LOGO designs and kaleidoscopes

BJB2 nods to Luann

BJB2: kids don't have that prior knowledge

BJB2: the next couple of sites I find very interesting

BJB2: The Knot Plot

BJB2: http://www.cs.ubc.ca/nest/imager/contributions/scharein/KnotPlot.html

LuannBa: I got an "Obsolete Web Page" message.

BJB2: Untangling the Mathematics of Knots

BJB2: http://www.c3.lanl.gov/mega-math/workbk/knot/knot.html

BJB2: Try again, Luann. Did anyone else have trouble with the Knot Plot site?

BJB2: http://www.cs.ubc.ca/nest/imager/contributions/scharein/KnotPlot.html

LuannBa: I finally got it to work.

BJB2 breathes a sigh of relief

BJB2 . o O (everyone else is tied up right now?)

SusanR: playing around with the knot parameters...

BJB2: So you're Knot at loose ends, Sue?

BJB2 groans...oh, those are sooooo bad!

MarkWag: The knots looked quite intimidating. After exploring a little. The one site did show directions for making some basic knots. My students would enjoy the hands-on part. The symmetry may really stretch their minds. Good site though.

BJB2: This is the Art and Math discussion

SusanR: I am tied up in knots

BJB2 smiles

BJB2: The International Society of the Arts, Mathematics, and Architecture

BJB2: http://www.isama.org/

BJB2: am I going too fast?

LuannBa: My calculus students have figured out how to make some neat designs on their graphing calculators. That's what some of these remind me of.

KhristinaH: I don't think so, I will spend much more time in each site at a later time.

LuannBa: I agree.

BJB2: ok...then onward

BJB2: Circles of Light: The Mathematics of Rainbows

BJB2: http://geom.math.uiuc.edu/education/calc-init/rainbow/

BJB2: this can be simplified for your students, Mark...and is a nice link to science too

MarkWag: Way beyond my students

BJB2: rainbows are for everyone!

BJB2: Math in the Movies

KhristinaH smiles

BJB2: http://world.std.com/~reinhold/mathmovies.html

LuannBa: Using a prism would show them how a rainbow is made.

BJB2: right, Luann

BJB2: the next couple I'm sure are good for elementary level

BJB2: Math Quilts

BJB2: http://members.aol.com/mathquilt/index.html

KhristinaH: super

BJB2: the next site is good for those kinesthetic learners

BJB2: Math Dance

BJB2: http://www.mathdance.org/

MarkWag: Good links.

LuannBa: This one really looks interesting.

KhristinaH: All learners can benefit from the sites, this is great

SusanR: must use this with primary students

MarkWag: Excellent

BJB2: Pattern Blocks: Exploring Fractions With Shapes

BJB2: http://ejad.best.vwh.net/java/patterns/

DavidWe joined the room.

BJB2 waves to David

DavidWe waves

BJB2: Picturing Math: Using Picture Books in the Math Curriculum (K-2)

SusanR: a multitude of uses for pattern blocks

BJB2: http://www.carolhurst.com/products/picturing.html

MarkWag: Awesome. My students would love this. It is also great for multiple students when you don't have enough pattern blocks. Also another opportunity to get kids involved with technology.

BJB2: anyone ever seen Soda Play?

DavidWe nods yes vigorously

BJB2: http://sodaplay.com/index.htm

MarkWag: Carol Hurst is great for any subject area. Being a self contained teacher, I use literature whenever I can.

SusanR: played with sodaplay for hours

BJB2 agrees...she's got a wonderful newsletter

LuannBa: My juniors play with this when they have time during computer science.

KhristinaH: I can't wait to check it out

BJB2: I love the name of the next site: The Geometry Junkyard

BJB2: http://www1.ics.uci.edu/~eppstein/junkyard/all.html

BJB2: Last site for you today: Visual Mathematics

BJB2: http://www.mi.sanu.ac.yu/vismath/mart.htm

BJB2: I love the Impossible Structures

KhristinaH: Very neat! Thanks for the great resources, they are very helpful!

DavidWe would just put in a plug for the Math Forum and ENC unless BJ has already done it

BJB2: one last site....my resources

DavidWe nods

BJB2 . o O (I've already done that, David)

DavidWe nods

DavidWe smiles

DavidWe bows humbly

BJB2: http://www.backflip.com/members/bjberquist/5490487

MarkWag: Would be a great discussion starter

LuannBa: Great. I am just learning how to use Backflip.

BJB2: we're almost at the end of our hour...any comments or questions?

KhristinaH: Thanks for hosting a great discussion

LuannBa: Thank you and now have more interesting information to use in my classes.

BJB2 smiles happily

MarkWag: All new sites to me

LuannBa goodbye

BJB2: all the sites I showed you and a few more are on the backflip site

BJB2 waves bye to Luann

BJB2: Thanks, everyone, for participating in the discussion

KhristinaH waves to everyone

SusanR: Super, Bj

MarkWag: Adios

BJB2: thanks, Sue

DavidWe . o O (good job, Mrs. Berquist)

BJB2 bows to Mr. Weksler

BJB2 waves goodnight to everyone. Don't get tied up in your computers