

Early Math

Becoming Numerate

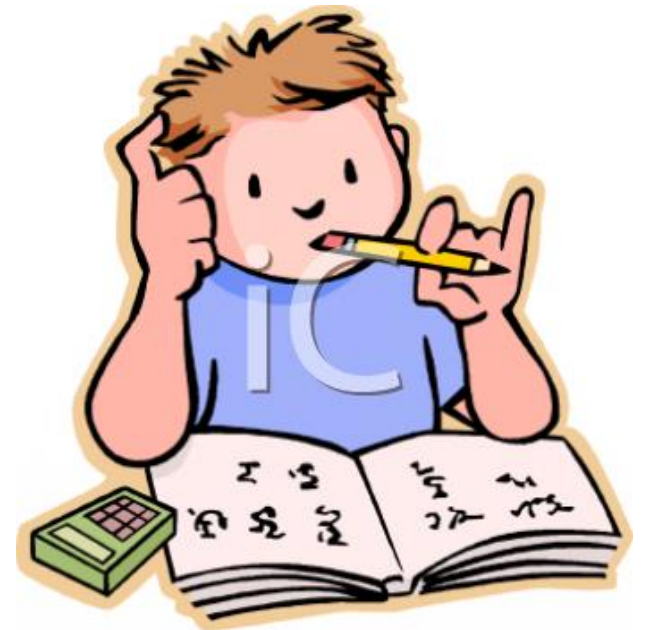
NCESD PRESENTATION BY KATIE LAWLESS



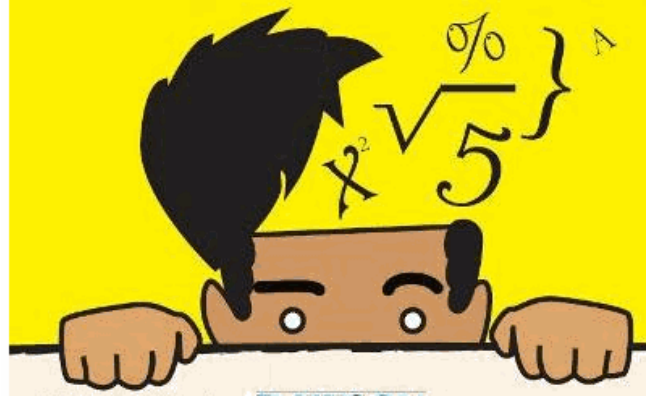
Introductions

What do you picture when you think about Math?

What has contributed to your attitude about Math?



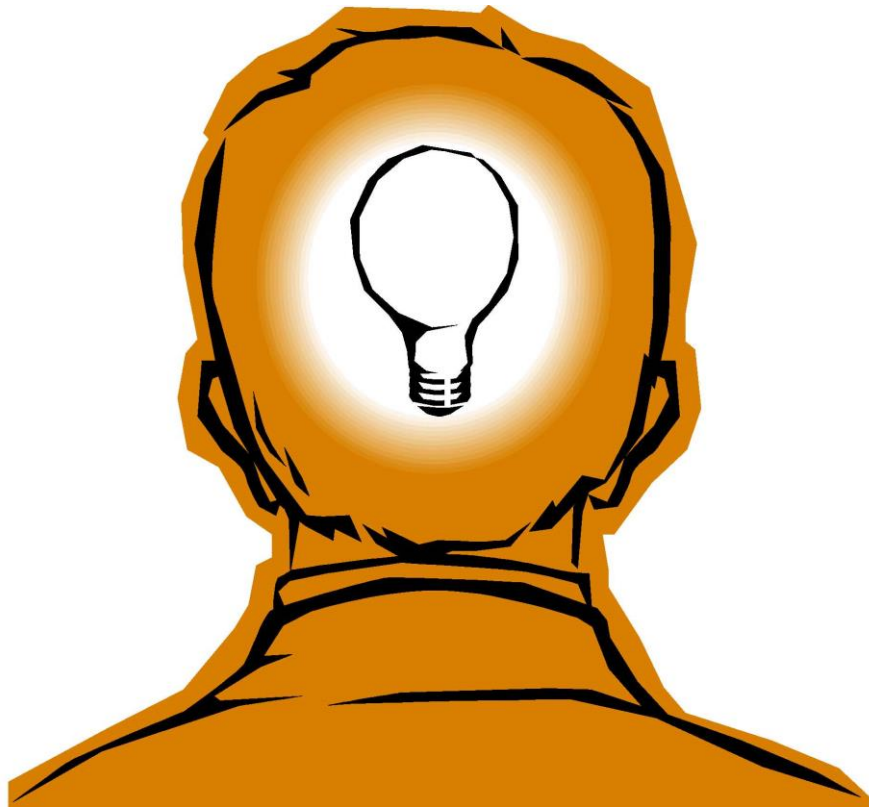
What is Numeracy?



By Numeracy we mean the ability to use mathematics in everyday life.

It is about having the confidence and skill to use numbers and mathematical approaches in all aspects of life-at work, in practical everyday activities at home, and beyond. Being numerate means being able to reason with numbers and other mathematical concepts and to apply these in a range of contexts to solve a variety of problems. It is as much about thinking and reasoning logically as about calculating.

Attitude is Central to Fixing the Problem



1. Be willing to solve problems involving number, data or measurement.
2. Persevere and try different approaches: don't give up.
3. Develop self-confidence.
4. Become comfortable with numbers.

Learning Pathways in Numeracy

Vocabulary:

- Developmental
- Benchmarks
- Domains
- Subitizing

Resources:

- Common Core State Standards (CCSS)
- Early Learning Guidelines (ELG)
- Teaching Strategies GOLD progressions of development

Please take the next 5 minutes to read the Introduction.
Underline one sentence or phrase that stands out to you.

Activity

Take the next 35 minutes to:

- Form teams for each box.
- Read over the Learning Pathways in Numeracy section for your box domain.
- Examine the provided materials in the box.
- Together create 2 brief lessons using the materials (two different age groups).
- Be prepared to use the Pathways document to back up what you decided to do.
- Talk about the setting for your lesson (during circle, during one-on-one time, outside...?)
- How will you modify your lesson for students at a different level (Lower performing or advanced)

Sharing

Break



Welcome Back



Rich Instructional Tasks

Read: [WHY YOUNG CHILDREN CAN-AND SHOULD- LEARN MATH](#)

Activity 1

Take the next 20 minutes to:

Check out the Binder

- Find the meaning of the * and (A) in the welcome page
- Visit the contents and common core pages
- Read over the page about books
- Notice the suggested scheduling of activities (i.e. circle time...) in the Adaption Section
- Skim through the counting songs.

What is Rich Task Instruction?

A rich task offers different opportunities to meet the different needs of learners at different times.

A task becomes “rich” when it is presented in an environment that includes support and questioning by the teacher and active engagement by learners.

Learners are not passive recipients of knowledge, but instead independent assertive constructors of their own understanding who challenge and reflect.

On it's own, no task is necessarily “rich”- it is only what is made of it that allows it to reach its full potential!

<https://www.youtube.com/channel/UCrCPQBFq2unAr1fCzT35CbA/videos>

Activity 2

Take the next 20 minutes to:

At your table-

- Choose an activity from the binder at your table.
- Talk as a group about how you can enhance this activity to make it a “rich” task.
- Generate good questions to ask.
- Choose one person to be the teacher and the rest to be children.

Present your lesson as a role play.

NCESD Math Box Project

Available to borrow:

Eastmont

- Lee Elementary

Wenatchee

- Columbia Elementary
- Newberry Elementary
- Lincoln Elementary
- Mission View

An Elementary Near You!



I have a dream to....

Remove the fear of mathematics from every early childhood teacher.

Hear children speak with enthusiasm and confidence about Math.

Replicate these Math Boxes in Elementary Schools around our state, and see them in use by Early Learning Providers on a regular basis.

Feel free to use the extra poster board, markers and scissors to replicate any activity you would like!

Thank you!

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