

Tips for Starting your Own Math Challenge Board!

DO make the challenges fun and optional

DO make the challenge school wide and not classroom specific

DO use technology to market your math challenge board

DO sequence difficulty. If you start out with a challenge that is accessible to all students, it will increase student involvement.

DO make your challenges **authentic** with a **real-life application**

DO make your challenges **language level appropriate**

DO use **visual aides** that attract students

DO make interesting themes for your boards (Holiday themes were very popular)

DO make your directions clear and make tasks easy to understand

DO make answer cards clear and include that they must write their complete name, ID number, Teacher and answers to each question

DO use **rewards** to make the challenge fun and validating

DO **honor all right answers** regardless as to how a student got there and reward all winners

DO make it important to the students by visiting winners in their classroom

DO have students **explain results in different languages**

DO celebrate that two students can do things a different way and come to the same right answer

DO measure which boards had the most participation to evaluate your success

DO share responses with faculty to inform their teaching and illustrate areas of growth

Resources we've found useful

- Teachers Interested in Adult Numeracy: http://tian.terc.edu/TIAN_teacher_resources.html
- Adult Numeracy Network: <http://www.adultnumeracynetwork.org/>
- Equipped For the Future: Hot Topics and their webpage on “Use Math to Solve Problems and Communicate” http://eff.cls.utk.edu/PDF/Hot_Topics-winter054.pdf
- World Education – Online courses on Numeracy in Adult Education: <http://elearningpd.worlded.org/courses/>
- SABES Math Bulletin: <http://www.sabes.org/info-center/sabes-publications/sabes-math-bulletin/>
- NCSALL: The Components of Numeracy: <http://files.eric.ed.gov/fulltext/ED495440.pdf>
- Canadian Language Benchmarks for Adult Literacy Learners
- Numeracy in the Adult ESL Classroom: http://www.cal.org/caela/esl_resources/digests/Ciancone.html
- Adult Numeracy: A Reader: <http://www.caalusa.org/Adult.pdf>
- Ed Week article on Common Core & ELLs: <http://www.edweek.org/ew/articles/2014/11/12/12cc-ell.h34.html>

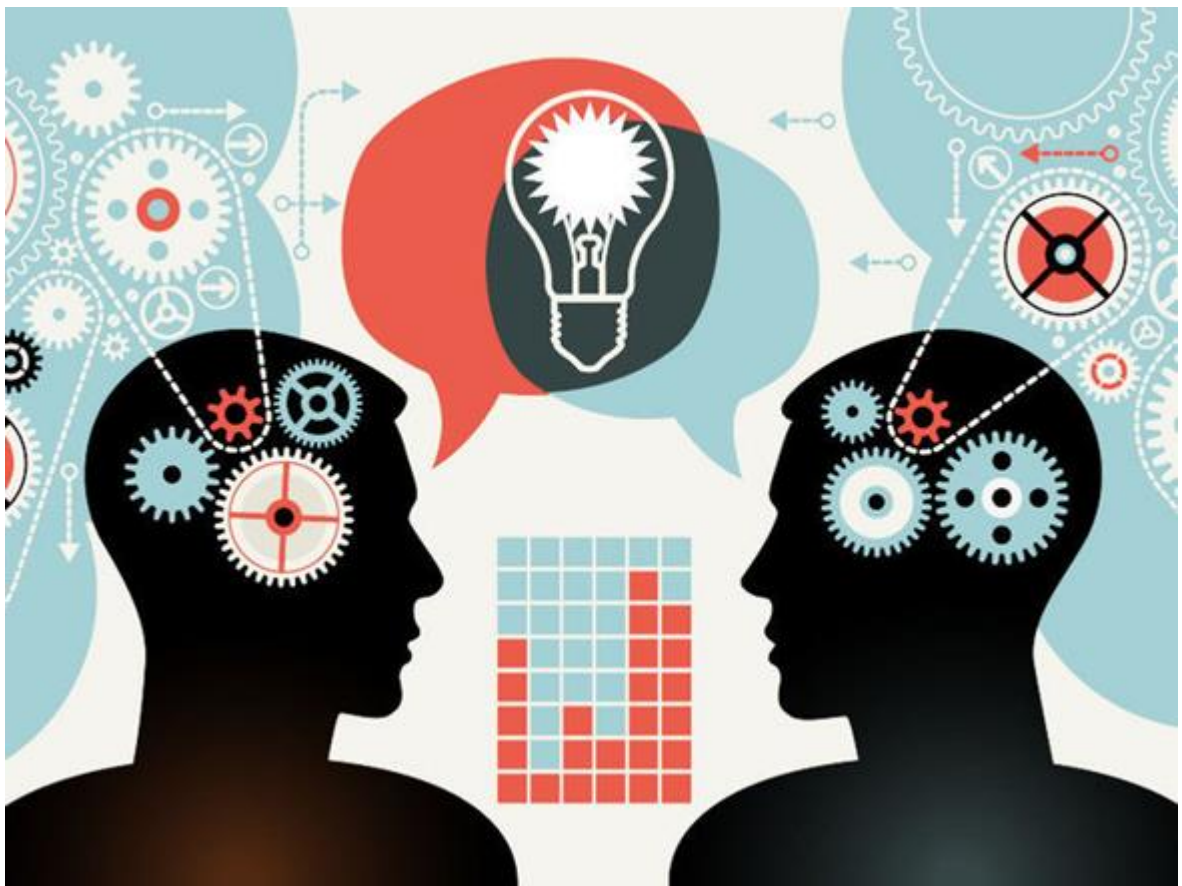
My Life in Numbers

Numeracy - February 2015

Share your experience on the TLC at

[CR Google+ Community](#)

or at <http://goo.gl/y18Uli>

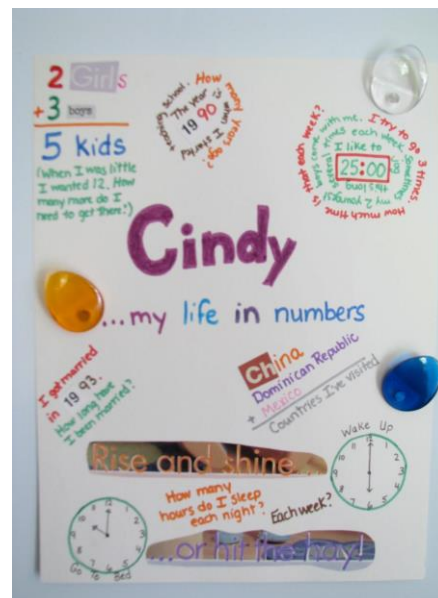
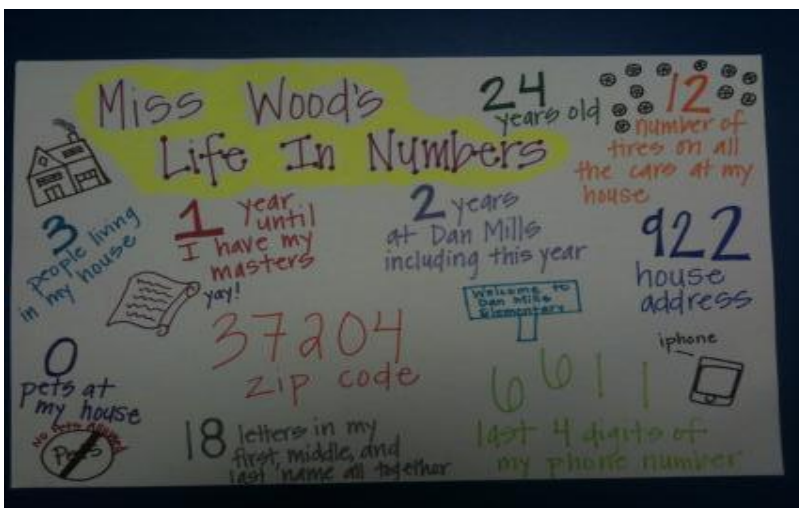


What is Phase 1,2,3? - These are three sequential phases of numeracy ability. You will likely have learners in your class across all three of these phases. *Notice where your learners are.* Encourage them to work together. Provide a variety of options for them to choose from for this activity.

My Life in Numbers

Phase 1:

Numeracy Skill	Suggested Activities
<p>Understand that numbers always represent something in real life.</p> <p>Compare</p> <ul style="list-style-type: none"> • Number of children • Height: who is taller/shorter • Age: Older/younger • Length of time in the U.S <p>Arrange in order by</p> <ul style="list-style-type: none"> • Age • Number of siblings • Length of time in U.S. • Number of children <p>Estimate</p> <ul style="list-style-type: none"> • How many hours you work in a week <p>Simple sequences</p> <ul style="list-style-type: none"> • Birth order of children or siblings • Sequence of important life event <p>Written form of numbers</p> <ul style="list-style-type: none"> • I have 3 children. = I have three children. 	<ul style="list-style-type: none"> • Students brainstorm a list of how numbers relate to their lives, e.g. age, number of children, apartment #, etc. • Students create posters that describes who they are and use numbers to tell the story. Information may include house/ apartment number, age, birth date, favorite number, the number of times they've done something, how many of something they have, etc. • Students create a timeline with dates of important life events • Class line ups- as a group, students organize themselves by age, amount of time in the U.S., height, etc.

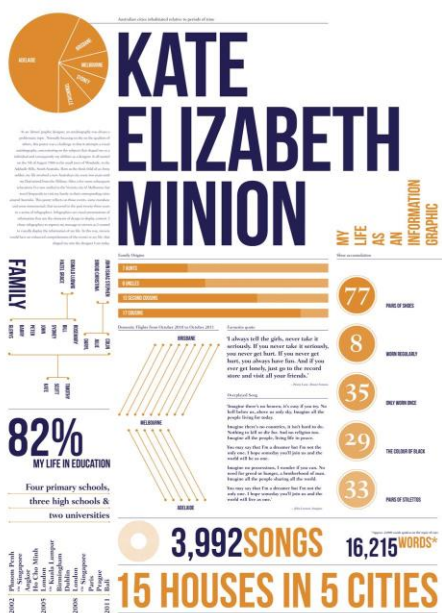


Phase 2:

Numeracy Skill	Suggested Activities
<p>Understand counting and sequencing of whole numbers.</p> <p>Count forward by 1's (people), 2's (couples), 5's (years), 10's, etc.</p> <p>Group, count, record</p> <ul style="list-style-type: none"> Graph how many student from each country, of each language, etc. <p>Sequence & compare</p> <ul style="list-style-type: none"> Height Length of time in U.S <p>Estimate</p> <ul style="list-style-type: none"> Monthly food bill How long it will take to finish your studies at CR How many hours of learning in a semester <p>Place values</p> <ul style="list-style-type: none"> I am 59. The "5" means 50. There are 9 ones and 5 tens. <p>Round off numbers</p> <ul style="list-style-type: none"> How long it takes to get to school How much money you earn 	<ul style="list-style-type: none"> Use graph paper to make a timeline in increments of 5 years Students create posters that describes who they are using numbers to tell the story (see above) AND show off their math knowledge! E.g. age: 15×3 Create a post on a Google+ community, e.g. http://becomingadorrable.com/2014/01/21/my-life-in-numbers/



Phase 3:

Numeracy Skill	Suggested Activities
<p>Sort numbers into categories using one or more attributes.</p> <p>Develop number questionnaires</p> <ul style="list-style-type: none"> Collect demographic data <p>Use a variety of graphs</p> <ul style="list-style-type: none"> Student demographics Monthly expenses TEAAL results <p>Estimate & compare large quantities</p> <ul style="list-style-type: none"> Annual income Country/city population <p>Rounding off numbers</p> <ul style="list-style-type: none"> Income Expenses <p>Place value of large numbers</p> <ul style="list-style-type: none"> The population of my city is 1,765,349. The “1” means one million. The “7” means seven hundred thousand, etc. <p>Understand multiples</p> <ul style="list-style-type: none"> Every 5 years = 1970, 1975, 1980, 1985... Every decade = 1980, 1990, 2000, 2010 	<ul style="list-style-type: none"> Create an infographic that describes who they are in numbers Students create and administer a class survey and create a chart of the results  <p>The infographic 'KATE ELIZABETH MINION' features several data visualizations: a pie chart for 'MY LIFE AS AN INFORMATION GRAPHIC', a bar chart for 'FAMILY' (listing 77, 8, 35, 29, 33), a line graph for 'MY LIFE IN EDUCATION' (82%), and a bar chart for '3,992 SONGS' and '16,215 WORDS*'. It also includes a section for '15 HOUSES IN 5 CITIES'.</p>

