Resources for Working with ELLs in Mathematics

http://www.colorincolorado.org/

website ¡Colorín Colorado! ¡Colorín Colorado! is a wealth of information for all educators of ELLs. It also provides information, activities, and advice for Spanish-speaking parents of ELLs. Teachers are invited to print and distribute the information on this site. Check it out. It's worth the visit.

https://www.teachingchannel.org/videos/math-for-newcomers-ousd

Newcomer Instruction: Supporting Language and Content Learning in Math

Teaching Channel Video on scaffolding instruction for ELLs in math, using a classroom of students who have been in the United States for less than a year. Part of a series "Content Conversations: Strategies for ELLs" with three math and ELL videos

http://ell.stanford.edu/teaching_resources/math

Understanding Language: Supporting ELLs in mathematics. This is a resource website from Stanford University with excellent examples and actual mathematical tasks scaffolded for ELLs.

http://www.cal.org/siop/

The SIOP Model* is a research-based and validated model of sheltered instruction that has been widely and successfully used across the U.S. for over 15 years Professional development in the SIOP Model helps teachers plan and deliver lessons that allow English learners to acquire academic knowledge as they develop English language proficiency.

http://my.hrw.com/math06_07/nsmedia/tools/glossary/msm/glossary.html

A multilingual math glossary with math terms in over a dozen of the most commonly used languages spoken by ELLs in U.S. classrooms.

"Beyond Good Teaching: Advancing Mathematics Education for ELLs" (2012) by Nora Ramirez and Sylvia Sylvia Celedon-Pattichis

(Book) Many languages, many cultures, one goal high-quality mathematics education...
English language learners share a basic need to engage, and be engaged, in meaningful mathematics. Through guiding principles and instructional tools, together with classroom vignettes and video clips, this book shows how to go beyond good teaching to support ELLs in learning challenging mathematics while developing language skill

Common Myths about Working with English Language Learners in Math – see next page – all are false.

English Language Learners in Mathematic: True or False

Directions: Place a check under "T" if you believe the statement is generally true, place a check under "F" if you believe the statement is generally false.

Statement	T	F
1. (In general) Math is a universal language, a language in itself, so ELLs will be fine in math without specialized support.		
2 It is not the job of the mathematics teacher to teach language. That is someone else's job.		
3. If a student speaks English well in conversation the teacher can conclude he or she should be fully able to participate in math class.		
4. Using manipulatives is sufficient to give ELLs special support in math.		
5. Teachers should not use words in an ELL's language, even if they know them, because students will not learn English this way.		
6. Posting definitions and having students take notes on them is the most important way to ensure that ELLs understand terms used in math.		
7. Students possess a deficit when they do not know English, because they have no language resources to draw upon.		
8. Using general (not math-specific) teaching techniques for the ELL population is all we need to do to help ELLs in mathematics.		
9. It is better to pair a beginning or intermediate ELL student with a native speaker of English *instead* of an advanced or transitional ELL who speaks the same language.		
10. If an ELL student sees the equations of parallel lines and says "These is the equations of parallel lines" it is best practice for the teacher correct the student by saying, "Repeat after me: "These *are* the equations of parallel lines."		
11. Generally, teachers should lower the mathematical difficulty of problems assigned to students who are not fluent in English.		
12. If teachers use the general best practices in mathematics, such as modeling, using manipulatives, etc., then these practices are so good that no further measures need be included for ELLs.		
13. If a classroom has both ELLs and non-ELLS, research indicates that using *specialized instructional techniques* for ELLs may result in decreased learning for the non-ELLs.		
14. It is generally sufficient to write everything on one smart board, erasing as you go, to help ELLs learn in mathematics and other subjects.		
15. "Learning styles" are a major way to decide on what is and is not appropriate for ELLs. For instance, if an ELLs is not a visual learner, there is no need to emphasize charts, graphs and pictures to help with understanding.		