Figure 3.1: Team Discussion Tool—Categories of Vocabulary Challenges for Students

Area of Challenge	Possible Examples	Team Vocabulary Reflection for the Current Mathematics Unit
Mathematics and everyday English share some words, but they have different meanings in the two contexts or the mathematics meaning is more precise.	• *Right* angle versus *right* answer • *Foot* as twelve inches versus *foot* as body part • *Difference* as the answer to a subtraction problem versus *difference* as a general comparison	
Some mathematics words are found only in mathematical contexts.	• Quotient • Denominator • Integer • Isosceles • Histogram	
Some words have more than one mathematical meaning.	• *Square* as a shape versus *square* as a number times itself • *Round* as a shape versus *round* as a number operation	
Some mathematical words are related, but students may confuse their distinct meanings.	• *Hundreds* and *hundredths* • *Factor* and *multiple* • *At most* and *at least* • *Solve* and *simplify*	
English spelling and usage have many irregularities.	• *Four* has a u, but *forty* does not. • Fraction denominators, such as *sixth*, *fifth*, *fourth*, and *third*, are written like ordinal numbers, but rather than *second*, the next fraction is *half*.	
Some mathematics concepts are verbalized in more than one way.	• *Skip count* versus *find the multiples* • *One quarter* versus *one-fourth* • *Solutions*, x-*intercepts*, and *roots*	
Some mathematical words are homonyms with everyday English words.	• *Sum* versus *some* • *Arc* versus *ark* • *Pi* versus *pie* • *Graphed* versus *graft* • *Whole* versus *hole*	

Source: Adapted from Rubenstein, R., & Thompson, D. R. (2002). Understanding and supporting children's mathematical vocabulary development. Teaching Children Mathematics, *9(2), 107–112.*