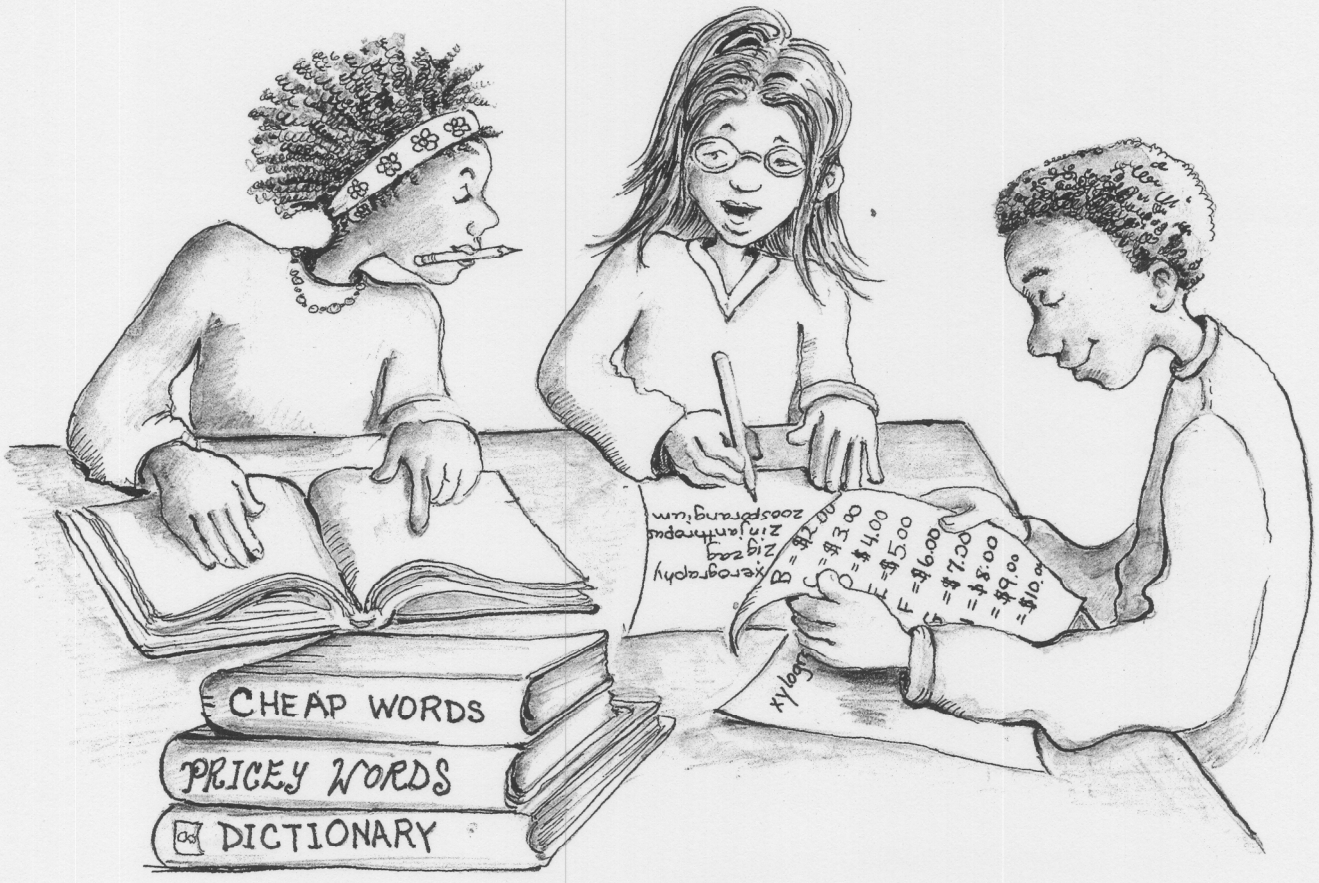
	Number sense

Value of Words Revisited

This activity is an extension to the *Value of Words* activity in the original *FAMILY MATH* book.	This activity provides experiences examining a series of cases for a mathematical question. The kind of thinking involved is important in algebra and geometry, as well as many other advanced mathematics courses.



MATERIALS

pencil and paper

calculators

WHAT'S THE MATH?

Mental arithmetic; estimation; logical thinking.

How

- Assign values to letters as shown.

A = $1	J = $10	S = $19
B = $2	K = $11	T = $20
C = $3	L = $12	U = $21
D = $4	M = $13	V = $22
E = $5	N = $14	W = $23
F = $6	O = $15	X = $24
G = $7	P = $16	Y = $25
H = $8	Q = $17	Z = $26
I = $9	R = $18	

- Work [with your family] to see how many words you can find with values from $1 to $100. Keep a record of your work to ~~share~~ email with others.

- Are there any values between $1 and $100 you think will be impossible to find words for? If this is so, can you explain why? Might your answer be different for a language other than English?

We will, via email,

- Collect words from the whole group to see how many different words you have found for each value.

- Can you find a sentence worth $1,000? $1,500? $2,000? ■

Please email your responses to your math teacher.

Extensions

- Find values for words from languages other than English. Some languages such as Hawaiian and Finnish have more vowels and longer words than English. Some, such as Polish or Welsh, have more consonants. How do you think these conditions will affect the value of common words in Hawaiian, Finnish, Polish, and Welsh? Look in the library for dictionaries to help answer this question.

Statistics Extension

- Work on this activity two or three times. Then, collect all of the words. Use a graph to examine and determine information such as most frequent letter, least frequent vowel, etc., in the word collection. Discuss the results with your family.