ENGAGING IN A MATH CONVERSATION

13

Here is a short activity that you might want to try out with a math tutee. In this example, we use the number 13. In your small groups, using the number assigned to you, think of things that you know or believe about that number. The idea is to engage in a conversation about a particular natural number. Write your group's answers on the flip chart paper provided.

Example: Here is a story about **13**.

- o   13 is a natural number.
- o   13 is the successor of 12.
- o   13 is the predecessor of 14.
- o   13 is a prime number.
- o   The reverse of 13 (31) is also a prime number.
- o   Factors of 13: 1, 13
- o   Sum of factors of 13 = 14
- o   13 is a Fibonacci number.
- o   Triskaidekaphobia is the fear of 13.
- o   Triskaidekaphilia is the love of 13.
- o   An aluminum (Al) atom has 13 protons.
- o   13 is a deficient number.

Notice that this "story" includes quite a few words from the language of math. One of your goals as a math tutor could be to help your tutee learn to make use of their text book, classroom resource, or the internet to define these terms and other find math-related information.

For example, what is a natural number? What is a prime number and why is it important in math? Who is Fibonacci and why is a certain type of number named after him? Do some very tall buildings not have a 13th floor? How can that be possible? Are there widely used words that have exactly 13 letters?

What is a proton? Is there an atom that has exactly 12 protons, and is there an atom that has exactly 14 protons? Why and how is math used in sciences such as biology, chemistry, and physics?

What can one learn about the number 13 through use of the Web? A recent Google search using the term 13 produced over 20 billion hits! Suppose a person spent just 10 seconds looking at a hit to see if it relevant to their interests? How long would it take to process 20 billion hits?

A Google search of the word thirteen produced a little over 72 million hits. Why do you suppose that the math notation 13 produced so many more hits than the written word thirteen?

How do you think this activity can help to stimulate a conversation with your tutee about math? Discuss within your small group.

Source: *Becoming a Better Math Tutor* by David Moursund & Robert Albrecht
http://i-a-e.org/downloads/free-ebooks-by-dave-moursund/208-becoming-a-better-math-tutor/file.html