

Vocabulary Number Talk

Description

This discussion/activity is to have students come up with many ways to describe the relationship between numbers or patterns in sequences of numbers or other representations.

Prep Work

None

Instructions

○ Pre Activity

None

○ Activity

Start with writing the numbers 2 and 4 on the board or document camera. I start with 2 and 4 because they seem so simple but have so many ways they are related.

Ask the class to describe ways that these two numbers are related. Try not to give any answers but keep asking questions until you get most or all of the following.

- Twice
- Double
- Two more than
- Two less than
- Half of
- Squared
- Square root of

Then ask the students to give similar statements using different numbers that relate in the same way.

- 6 is twice as much as 3
- if you double 7 you get 14
- Two more than 5 is 7 or 7 is two more than 5
- Two less than 8 is 6
- Half of 10 is 5
- 3 squared is 9
- The square root of 25 is 5

This can be repeated with any two numbers you want to start with. Some additional combinations that might be nice would be 5 and 10, 3 and 9, or 4 and 20.

If you follow this discussion up with making sure students know the meaning of the English words as mathematical operations it can support future work with translating. This activity can be extended to variables if you want to work on translating or describing algebraic expressions.

This type of activity could be helpful to see and describe how patterns grow or decay. It can lay the foundation for future work with exponential modeling through patterns as well as sequences and series.

○ **Post Activity**

None

Time Required

10 – 30 minutes
