Prerequisites and references for multiplication on the Cranmer abacus

1. Students should have an understanding of abacus basic concepts. If you want a refresher, refer to Debra Sewell's *Abacus Introduction: Parts of the Abacus* and *Abacus Introduction: Vocabulary Terms*.

2. Students should be fluent in addition on the abacus. Subtraction is great also, but you will be performing addition when multiplying, so it is very important. If you need to practice addition, I would recommend taking the Short-Term Programs course *Abacus Part 2, Addition and Subtraction*. For teachers and families, *Debra Sewell's Abacus: Getting Started with the Counting Method* is an excellent video resource.

3. Students should either be studying or have studied multiplication in your mathematics class or understand the concept of multiplication and vocabulary that is used. It helps to know that a multiplicand is the number being multiplied and the multiplier is the number doing the multiplying. The product, then, is the result of a multiplication problem.

4. For teachers and parents who would like to follow along or even work ahead, I am using *The Counting Method for the Cranmer Abacus*. This book also covers developing prerequisite skills for the abacus, addition, subtraction, division, decimals, and fractions.

Short-Term Programs

All of TSBVI's resources during COVID-19 are on the home page: [https://www.tsbvi.edu/](https://www.tsbvi.edu/)

Short-Term Programs’ resources are under the heading: *Short-Term Programs Students & Families*

There should be details and links to our teachers’ regular office hours.