

LINKAGE

Linking new material to previously learned mathematics concepts, procedures, and practical experiences, sets the stage to help students feel more comfortable in their knowledge and understanding of the new concept or procedure being introduced. Additionally, linkage also reinforces the previously learned concept. Mathematics teachers should remain cognizant of the fact that concepts and skills they teach today may be used later as building blocks to introduce more abstract ideas.

When teachers introduce concepts through linkages, it enables students to place new ideas into a context of past learning. Students are then more likely to understand, and therefore absorb new material. For example, the standard multiplication algorithm taught in fourth grade is exactly the same algorithm taught in algebra to multiply polynomials.

Also, linking mathematics to real-world experiences can be a positive method for introducing new concepts. For example, buying candy at a store can be linked to such mathematics concepts as ratios, proportions, ordered pairs, graphing, and functions. While students rarely link their transactions at the store to mathematics class, they quickly understand that if one candy bar costs fifty cents, then two will cost a dollar.

The understanding gained through concept development and linkages, in combination with memorization of basic facts and algorithms, gives students confidence and an increased comfort level in their ability to do mathematics.