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Investigating Numeric Relationships Using an Interactive Tool: Covering Number Sense Concepts for the Middle Grades

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ABSTRACT

This article investigates intriguing number patterns utilizing an emerging technology called the Square Tool. Middle School math teachers will find the Square Tool useful in making connections and bridging the gap from the concrete to the abstract. Pattern recognition helps students discover mathematical concepts. With the development of puzzles, games, and computer programs, students learn and practice the skills that are created in the mathematics classrooms. By studying patterns that exist within different number arrangements, consistencies are observed among them. Middle School students will investigate various mathematics relationships found in numbered squares including multiples, factors, ratios of comparative numbers, and other mathematical concepts.

KEYWORDS

Number Sense, Number Patterns and relationships, Puzzles, Games, Computer Programs, Number Arrangements, Multiples, Factors, Ratios of Comparative Numbers, Investigation, Number Squares, Number Games

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