Welcome to fourth grade! As a fourth-grade teacher, you can look forward to a school year filled with many wonderful experiences for you and your students. There are remarkable differences in the developmental stages of children from year to year, keeping in mind that chronological age might not match developmental age. Knowing a little bit about your fourth grader will give you information for planning lessons (Bechtel, 2002). The majority of fourth graders are nine years old or approaching nine. There might be many summer birthdays, so you will still be dealing with the developmental characteristics of 8-year-olds.

Social and Physical Development

The 8-year-old is industrious with a limited attention span; the 9-year-old is industrious and impatient. The fourth-grade teacher is fortunate because both age groups like to work and be involved, but they definitely need short spans of intense work so they do not get bored or frustrated. Both age groups prefer working with and making friends of the same gender.

The 8-year-old is usually cooperative and works well in groups; the 9-year-old may be competitive and prefer to work with a partner. The 9-year-old may be easily discouraged and sensitive to criticism. On the other hand, the 8-year-old is usually resilient and bounces back quickly from mistakes (Wood, 1997).

Fourth-grade students are concrete learners and are able to deal with multiple variables. They do not like to take risks and do not like to be wrong. Fourth graders have a strong sense of fairness, and this is very important to them. The students are developing study habits at this time, and they are beginning to reason and think for themselves. Fourth graders tend to be more realistic than imaginative. Because of tendencies toward impatience, anxiety, and discouragement, fourth-grade students worry about standardized tests. It would be wise to practice test-taking strategies throughout the year to reduce test stress in fourth-grade students.
What Fourth Graders Should Know

There are many standards presented in fourth grade, and they are more rigorous than at any other grade. To prepare students for an appropriate and engaging level of rigor in math, most outline the following content standards.

Number and Operations
This strand extends the understanding and use of numbers from the millions to three decimal places. Students will learn to view rounding as an essential mathematical skill to apply to real-world problems. Fourth graders will learn to interpret fractions and find equivalence. Students will learn to factor and know how to determine multiples. Students will identify positive fractions, positive mixed numbers, and positive decimals on a number line. Fourth grade students will multiply multi-digit numbers.

Algebra
Students in fourth grade will be introduced to and learn to manipulate more algebraic expressions and equations. As students develop fluency with multiplication and division facts, they generate algebraic rules and use all four operations to describe numeric and nonnumeric patterns. This further develops their understanding of functions.

Geometry and Measurement
Students will need to understand area completely, including the reasons behind the formulas used. Fourth graders may have difficulty recognizing that rectangles can have different perimeters but the same area, and the reverse, different areas can have the same perimeter.

Considerations for Grade-Level Accomplishments in Grade Four

The most important mathematical skills and concepts for children in grade four to acquire are:

- Read and write numbers in the millions
- Use whole numbers in the millions to solve problems in addition, subtraction, multiplication, and division
- Order and compare simple fractions and decimals to two decimal places
- Use and interpret variables, symbols, and properties to simplify expressions and solve equations
- Understand and use order of operations
- Understand the properties of and relationships between plane geometric figures
- Collect, represent, and analyze data to answer questions

Fourth graders will know the definitions of various angles as well as be able to describe models of geometric solids in terms of attributes.

Statistics, Data Analysis, and Probability
Fourth-grade students will apply their knowledge of organizing, representing, and interpreting data throughout mathematical topics.

Guide, Facilitate, and Motivate
Fourth graders are delightful, energetic, and full of surprises. With guidance, engaging lessons and hands-on experiences, they will be successful in mathematics and enjoy their learning experiences. As a fourth-grade teacher, you are a guide, facilitator, and motivator.

References

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