# **ExploreLearning Reflex**<sup>®</sup>

Correlations for 2012 Texas Math Essential Knowledge and Skills



*Reflex* helps students master basic math facts in addition, subtraction, multiplication, and division (addition and subtraction 0-10, multiplication and division 0-10, and multiplication and division 0-12). Using fact families and delivering the right facts at the right time for each individual student, *Reflex* meets students where they are – allowing them to build math fact fluency and the confidence to tackle more challenging mathematics.

#### **Reflex** and the Texas Math Essential Knowledge and Skills

The Texas Math Essential Knowledge and Skills contain rigorous and specific fluency-related standards. For example, the following standards are addressed through *Reflex*:

## Grade 2

2.4. Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:

2.4.A. recall basic facts to add and subtract within 20 with automaticity.

## Grade 3

3.4. Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:

3.4.F. recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts.

In addition, the Texas Math Essential Knowledge and Skills identify several standards that provide a strong foundation for math fact fluency. *Reflex* supports these as well.

#### Grade 1

1.3. Number and operations. The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. The student is expected to:

1.3.D. apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10.

1.5. Algebraic reasoning. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:

1.5.G. apply properties of operations to add and subtract two or three numbers.

#### Grade 3

3.4. Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to:

3.4.J. determine a quotient using the relationship between multiplication and division.

3.5. Algebraic reasoning. The student applies mathematical process standards to analyze and create patterns and relationships. The student is expected to:

3.5.D. determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.

## *Reflex* and Mathematical Process Standards

As stated in the standards above, the Texas Math Essential Knowledge and Skills rest on important processes with long-standing support from leading education organizations and researchers. Students use the following processes during a typical *Reflex* session:

1. Mathematical process standards: The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

1.D. communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.

1.E. create and use representations to organize, record, and communicate mathematical ideas.

1.F. analyze mathematical relationships to connect and communicate mathematical ideas.

1.G. display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.