



JOURNAL FOR UNDERSTANDING MATHEMATICAL PRINCIPLES

Grade 2
Teacher's Edition

Eliza Akana
Jonelle Flight
Suzanne Forbes
Ann Watanabe

Common Core Education, Inc.

Maui, Hawaii

2nd Edition

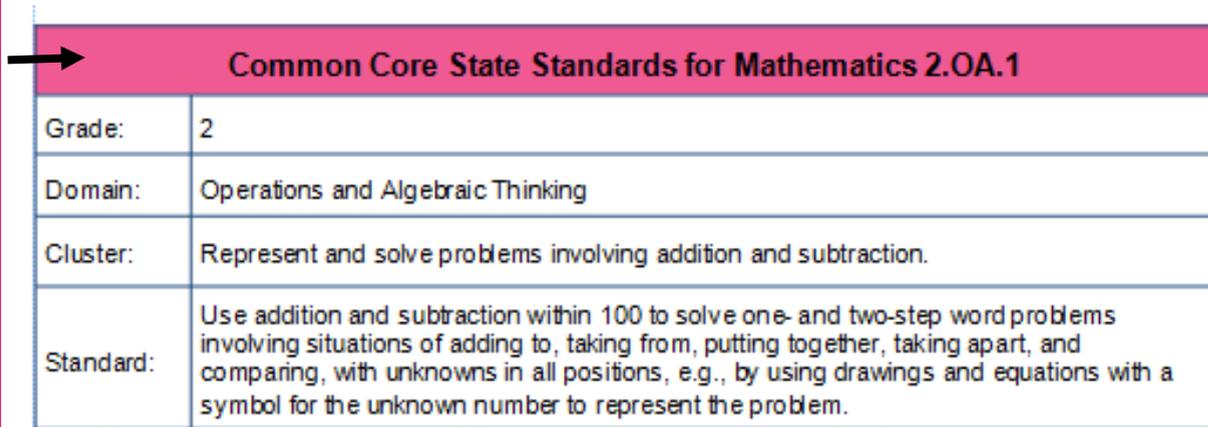
Introduction to JUMP

How is JUMP written for the Common Core State Standards for Mathematics?

One of the major shifts in the Common Core State Standards (CCSS) for Mathematics is the call for rigor. JUMP is designed to meet the rigor of the standards by focusing on students' conceptual understanding and application of the mathematical principles. The authors have analyzed and interpreted each standard to provide journal prompts that reflect what students need to know and be able to do at each grade level. In the second grade edition, prompts are provided for every Standard with the exception of 2.MD.3 which involve the correct use of a measurement tool and teacher observation. A CCSS information table is provided for each prompt in the Teacher's Edition. (See example below)

How does JUMP address the Critical Areas for each grade level?

The authors have identified Standards that address grade level Critical Areas. These Standards are highlighted in the CCSS information tables in the Teacher's Edition. (See example below)



Common Core State Standards for Mathematics 2.OA.1	
Grade:	2
Domain:	Operations and Algebraic Thinking
Cluster:	Represent and solve problems involving addition and subtraction.
Standard:	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Each student edition also includes prompts for content vocabulary terms that are essential to understanding mathematical concepts at each grade level. The terms that support the grade level Critical Areas identified by the CCSS are highlighted, as well.

How does JUMP support the Standards for Mathematical Practice?

JUMP deepens students' understanding of mathematical concepts while reinforcing critical processes and proficiencies outlined in the CCSS for Mathematical Practice. JUMP asks students to make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct arguments and critique their work and the work of others, model with mathematics, and use mathematical tools. Most importantly, JUMP asks students to attend to precision while communicating mathematically.

How is **JUMP** different from a workbook?

JUMP is designed to support the rigor of CCSS by promoting a deep conceptual understanding and application of mathematical concepts and principles. For example, a student may be able to mentally multiply 6×7 , but he or she may not be able to explain the concept of multiplication. Unlike workbooks, which are designed for skills practice, **JUMP** is designed for understanding.

How often should I use **JUMP**?

It is recommended that students respond to journal prompts on a regular basis. The frequency of use will depend on the standards that have been taught.

How can **JUMP** be used?

JUMP can be used in a variety of settings:

- Whole group instruction
- Small group instruction
- Peer learning teams
- Partners
- Individually

JUMP can be used for a variety of purposes:

- Pre-assessment
- Formative assessment
- Summative assessment
- Guided practice
- Independent practice
- Homework
- Enrichment
- Intervention
- Evidence for parent/teacher conferences
- Evidence for portfolios

JUMP can be used by a variety of educators:

- General Education Teachers
- Special Education Teachers
- Teachers of English Language Learners
- Math Resource Teachers
- Summer School Teachers
- Intervention Teachers
- Tutors

Write an even number that is less than 20. **Draw** a picture that proves your number is even. **Explain** why your number is even.

Write

1 Point
 ← Student writes an even number less than 20.

Draw

1 Point
 ← Answers will vary. Student's drawing accurately illustrates the number written above and proves the number is even.

Explain

1 Point
 ← Answers will vary. Student's explanation must be accurate and complete.

CCSS.2.OA.3—A

11

Total: 3 Points

Common Core State Standards for Mathematics 2.OA.3	
Grade:	2
Domain:	Operations and Algebraic Thinking
Cluster:	Work with equal groups of objects to gain foundations for multiplication.
Standard:	Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

Write the number that is 10 less than 520.

Write

1 Point

510

Write the number that is 10 less than 117.

Write

1 Point

107

Write the number that is 10 less than 407.

Write

1 Point

397

Explain how you used mental math to get your answers.

Explain

1 Point

Answers will vary. Student's explanation must be accurate and complete.

CCSS.2.NBT.8—B

25

Total: 3 Points

Common Core State Standards for Mathematics 2.NBT.8

Grade:	2
Domain:	Number and Operations in Base Ten
Cluster:	Use place value understanding and properties of operations to add and subtract.
Standard:	Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.