

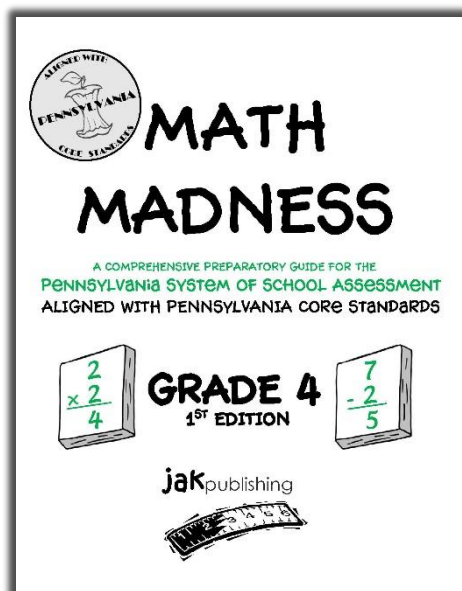
# PENNSYLVANIA – CURRICULAR ALIGNMENT

## GRADE 4

Math Madness provides a daily review for each of the five reporting categories for Grade 4 as defined in the assessment anchors framework published by the Pennsylvania Department of Education. All material listed in the “Eligible Content” column of the framework has been thoroughly covered.

To better prepare students to compete in today’s global economy, it is imperative that students are provided the opportunity to indicate their responses in ways other than a multiple-choice format. To meet the needs of Pennsylvania’s students, Math Madness includes an open-ended question in every lesson, thus providing students with a more rigorous format and an opportunity to articulate their thinking mathematically.

This workbook is designed to provide daily exposure to all Grade 4 Math reporting categories. The chart below shows the format for each daily lesson. This format allows an educator to note student weaknesses and provide an opportunity for remediation. For example, if a student consistently misses questions 4 and 5 it will alert the teacher to shortcomings in the area of operations and algebraic thinking.



Math Madness Question	Assessment Anchor / Descriptor Covered
1	<b>M04.A-T Number and Operations in Base Ten</b> M04.A-T.1 → M04.A-T.1.1 M04.A-T.2 → M04.A-T.2.1
2 and 3	<b>M04.A-F Number and Operations – Fractions</b> M04.A-F.1 → M04.A-F.1.1 M04.A-F.2 → M04.A-F.2.1 M04.A-F.3 → M04.A-F.3.1
4 and 5	<b>M04.B-O Operations and Algebraic Thinking</b> M04.B-O.1 → M04.B-O.1.1 M04.B-O.2 → M04.B-O.2.1 M04.B-O.3 → M04.B-O.3.1
6	<b>M04.C-G Geometry</b> M04.C-G.1 → M04.C-G.1.1
7 and 8	<b>M04.D-M Measurement and Data</b> M04.D-M.1 → M04.D-M.1.1 M04.D-M.2 → M04.D-M.2.1 M04.D-M.3 → M04.D-M.3.1
9 / 10	<b>Open-Ended Question</b> (Mixed Review of All Domains/Standards)

For maximum benefit, this workbook should be used 4-5 days a week. Ideally students complete one Math Madness lesson each day as part of their morning work. Daily math lessons then begin by spending approximately 10-15 minutes reviewing the lesson and discussing each problem. With daily practice, you will find students learn these concepts before formal instruction is given. As the year progresses, Math Madness becomes a review of what has been taught, practice of current concepts, and a preview of what’s still to come. Eventually it becomes a review of the 4<sup>th</sup> grade math curriculum. Teaching math concepts in this manner provides educators with a method that will help students retain information taught throughout the year thus minimizing the need to review concepts in preparation for the PSSA. If used consistently the payoff is big – students become confident mathematicians with high test scores.