

math

MAMMOTH

Grade 2-A Worktext
International Version (Canada)

Some revision, even and odd numbers, and doubling

Reading the clock

Addition and subtraction facts within 0-18

Adding two-digit numbers

Geometry and fractions



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By Maria Miller

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Foreword

Math Mammoth International Version Grade 2-A and *Grade 2-B* worktexts comprise a complete maths curriculum for the second grade mathematics studies.

This curriculum is essentially the same as the version of Math Mammoth Grade 2 sold in the United States (US version), only customized for Canadian audience in a few ways. The US version is aligned to the Common Core Standards, so it may not be properly aligned to the second grade standards in your province. However, you can probably find material for any missing topics in neighbouring grades. For example, let's say that your province mandates the study of multiplication tables in grade 4. That material is not found in Math Mammoth Grade 4, but it does appear in Math Mammoth Grade 3-A. So, you can simply re-order the material to solve most incompatibilities between different standards.

The International version of Math Mammoth differs from the US version in these aspects:

- The currency used in the money chapters in grades 1-3 is the Canadian dollar. (Additionally, the download version of this curriculum includes the chapter on money for European, South African, US, British, Australian and New Zealand currencies, in grades 1-3.)
- The curriculum teaches the metric measurement units. Imperial units, such as inches and pounds, are not used.
- The spelling conforms to British international standards.
- Paper size is Letter.

The main areas of study for second grade are:

1. Understanding of the base-ten system within 1000. This includes place value with three-digit numbers, skip-counting in fives, tens, and multiples of hundreds, tens, and ones (within 1000) (chapters 6 and 8);
2. Develop fluency with addition and subtraction, including solving word problems, regrouping in addition, and regrouping in subtraction (chapters 1, 3, 4, and 8);
3. Using standard units of measure (chapter 7);
4. Describing and analyzing shapes (chapter 5).

Additional topics we study are time, money, introduction to multiplication, and bar graphs and picture graphs.

This book, 2-A, covers reading the clock (chapter 2), the basic addition and subtraction facts within 18 (chapter 3), regrouping in addition (chapter 4) and geometry (chapter 5). The rest of the topics are covered in the 2-B student worktext.

Some important points to keep in mind when using the curriculum:

- These two books (parts A and B) are like a “framework”, but you still have a lot of liberty in planning your child’s studies. While addition and subtraction topics are best studied in the order they are presented, feel free to go through the sections on shapes, measurement, clock and money in any order you like.

This is especially advisable if your child is either “stuck” or is perhaps getting bored with some topic. Sometimes the concept the child was stuck on can become clear after a break from the topic.

- Math Mammoth is mastery-based, which means it concentrates on a few major topics at a time, in order to study them in depth. However, you can still use it in a *spiral* manner, if you prefer. Simply have your child study in 2-3 chapters simultaneously. This type of flexible use of the curriculum enables you to truly individualize the instruction for your child.

- Don't automatically assign all the exercises. Use your judgment, trying to assign just enough for your child's needs. You can use the skipped exercises later for revision. For most children, I recommend to start out by assigning about half of the available exercises. Adjust as necessary.
- For revision, the curriculum includes a worksheet maker (Internet access required), mixed revision lessons, additional cumulative revision lessons, and the word problems continually require usage of past concepts. Please see more information about revision (and other topics) in the FAQ at <https://www.mathmammoth.com/faq-lightblue.php>

I heartily recommend that you view the full user guide for your grade level, available at <https://www.mathmammoth.com/userguides/>

Lastly, you can find free videos matched to the curriculum at <https://www.mathmammoth.com/videos/>

I wish you success in teaching maths!

Maria Miller, the author

Chapter 1: Some Old, Some New

Introduction

The first chapter of the *Math Mammoth Grade 2-A* contains some revision and some new topics.

In the first two lessons, we revise adding and subtracting two-digit numbers from first grade. Then students get to revise skip-counting using the 100-chart.

Next, the lesson *Fact Families* revises the connection between addition and subtraction, and introduces a new strategy for missing subtrahend problems (of the type $__ - 5 = 4$). In these problems, the student can *add* to find the missing total. This is an early prelude to algebraic thinking.

Then we go on to the “new”, starting with ordinal numbers, which are probably familiar from everyday language. Then, in the lesson *Subtracting Whole Tens*, students subtract *mentally* any number of whole tens from a two-digit number, such as $72 - 40$.

Even and odd numbers are presented in the context of equal sharing: if you can share that many objects evenly (equally), then the number is even. Students may need to use manipulatives (objects you can handle) to grasp this idea.

Then we study doubling and halving. Please do not skip the simple word problems included in these lessons — they are very important. Children need to learn to apply the concepts they have just learned. Also, if the student cannot solve simple word problems that involve doubling or halving, there is a good chance the student did not actually learn those concepts.

The Lessons in Chapter 1

| | page | span |
|---------------------------------------|------|---------|
| Some Revision | 9 | 2 pages |
| The 100-Chart and More Revision | 11 | 3 pages |
| Fact Families..... | 14 | 2 pages |
| Ordinal Numbers | 16 | 2 pages |
| Even and Odd Numbers | 18 | 2 pages |
| Doubling | 20 | 3 pages |
| One-Half | 23 | 2 pages |
| Adding With Whole Tens | 25 | 3 pages |
| Subtracting Whole Tens | 28 | 2 pages |
| Revision, Chapter 1 | 30 | 2 pages |

Helpful Resources on the Internet

We heartily recommend you take a look at the list. Many of our customers love using these resources to supplement the bookwork. You can use the resources as you see fit for extra practice, to illustrate a concept better, and even just for some fun. Enjoy!

<https://links.mathmammoth.com/gr2ch1>

