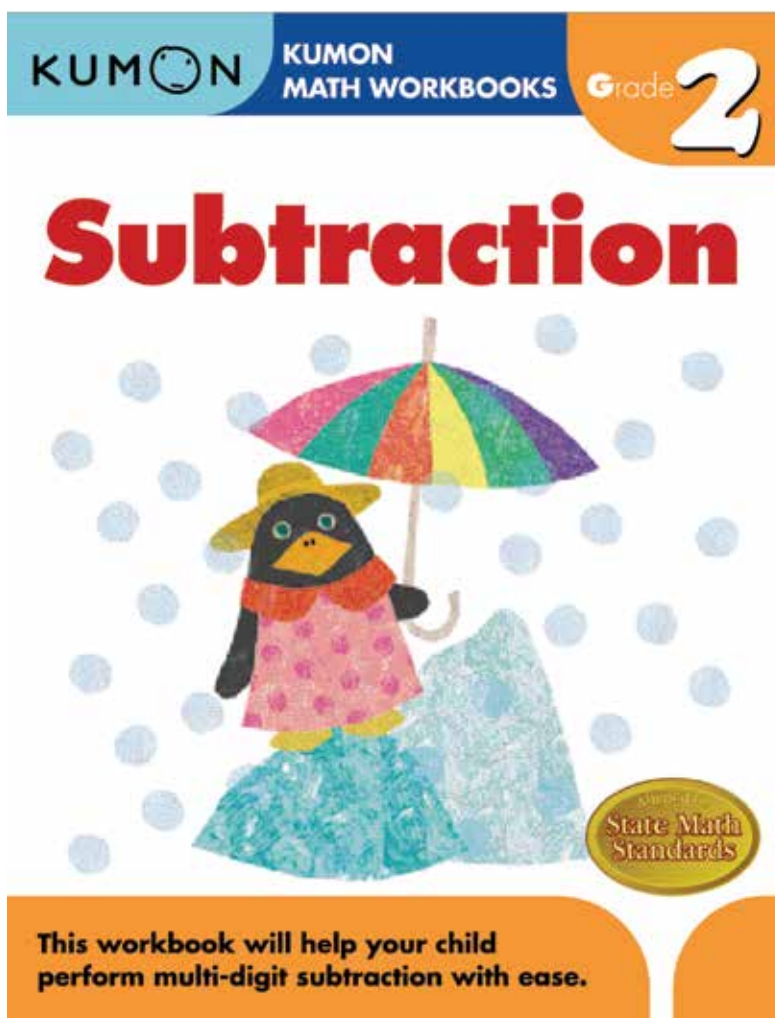


Kumon *Grade 2 Subtraction* Workbook Educator's Guide

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Using Kumon Calculations Workbooks: General Guidance

Kumon Calculations Workbooks follow the Kumon Method, a proven learning system from Japan that has helped millions of children worldwide develop math skills without frustration.

You can use Kumon Calculations Workbooks to **introduce new math skills** or to **provide additional support** after/alongside another program. The table below shows benefits of each approach.

Using Kumon Workbooks to teach a new skill	Using Kumon Workbooks for additional support
<ul style="list-style-type: none">• Learn the new concept(s) using an efficient and targeted approach• Avoid development of misconceptions• Progress toward mastery of the relevant math facts and procedures• Improve your child's mental calculation abilities and their ability to learn independently	<ul style="list-style-type: none">• Refine and deepen understanding of the concept(s)• Solidify mastery of math facts and gain procedural fluency• Identify and correct misconceptions• Improve your child's mental calculation abilities and their ability to learn independently

Please note that **for the full benefit of the Kumon Method**, including personalized learning plans and individualized instruction, take the next step and contact a Kumon Learning Center near you. Visit www.kumon.com for more information about our Learning Centers.

Important Steps

For all Kumon Calculations Workbooks, please use the following steps for best results.

Timing
<ul style="list-style-type: none">• We recommend having your child complete about one section (2 pages) a day. This should include the answer check.• Each daily session is about 15 to 30 minutes. If your child is learning the skill for the first time, the learning session will be closer to 30 minutes.
Sequencing
<ul style="list-style-type: none">• Even if your child is reviewing material, have them start on page 1 and work through the book page by page. Similarly, they should always work problems on each page in order. For best results, do not skip any content. <p>Kumon Workbooks are designed so the student “learns through doing”; therefore, the sequence of pages and</p>

problems in each book is key to the instructional method and effectiveness.

Checking Answers and Moving On

- Checking and correcting answers is an essential part of the learning process. One approach is to have a parent or teacher mark the child's answers as either correct or incorrect. Then have the child correct the wrong answers.
- You may choose to require a perfect score before your child moves on the next section. If you use this approach, you can repeat each section as many times as you wish by erasing it and having your child redo it. Or, have your child write answers on a separate sheet.

Encourage Self-Learning

- One hallmark of the Kumon Method is the emphasis on learning through doing rather than passive absorption of information. This is why there is minimal direct explanation in the book; the understanding comes through working problems in sequence.
- Support your child in the self-learning process by allowing them to work independently on the problems, correct their answers, and reflect on their errors. We encourage you to ask questions to promote deeper engagement, but resist the urge to "just explain" what they should learn from the page.

For a daily plan and page-by-page guidance to support using Kumon *Grade 2 Subtraction*, see the next page.

KUMON Grade 2 Subtraction Workbook: Daily Guide

Using this guide

- This guide organizes the workbook into daily sessions of 2 pages each.
- Each daily session should last about 15 to 30 minutes.
- Fill in the Date column to keep track of your progress.

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Date	Book Section	PP.	Description	Educator Notes
TOPIC: Review				
	1	2-3	Subtracting 1 to 3	This is the first page set for this workbook. Here your child will review subtracting numbers 1, 2, and 3 from numbers up to 12. This review is important to help your child practice mental calculation and prepare them for the more challenging subtraction problems they will face later in this workbook. You and your child may notice a pattern to the solutions in this page set. This section is designed to help your child see the different ways subtraction problems can produce the same solutions.
	2	4-5	Subtracting 4 to 5	This page set focuses on subtracting 4 and 5 from numbers up to 14. This page set provides your child more review of subtraction and practice with simple single-digit problems to prepare them for subtraction with 2-digit and 3-digit numbers later in this workbook. Subtraction of single digit numbers is the foundation for all subtraction problems. It is important that your child can solve these problems quickly and correctly before continuing in this book.
	3	6-7	Review	Here your child will continue to practice subtraction with single digit numbers. It is important to have your child check their answers when they complete a page or page set. This will give them two skills: the ability to self-correct any incorrect answers and encourage them to try again until they can solve all the problems correctly. This is the foundation for strong subtraction skills and independent learning.
	4	8-9		
	5	10-11		
	6	12-13	From Numbers up to 20	For this page set, your child will practice subtracting from larger numbers up to 20. You can offer your child help if they need it by pointing out that they can use their mental calculation skills from earlier pages to continue to solve these problems correctly. They can also use the previous problems and solution pattern to help them determine the correct answer if they have difficulty. For example, the first few problems deal with subtracting 1 from a larger number. You can remind your child that this is the same as counting one less than the number being subtracted from. This hint applies to all of the problems in this section. The solution for $15 - 6$ may not be familiar to your child, but they can break the problem down into pieces they are familiar with such as $10 - 6 = 4$ and then add the missing 5 back to the solution of that problem like this: $4 + 5 = 9$. 9 then becomes the answer to $15 - 6$.
	7	14-15	From Numbers up to 20	
Topic: 2-Digit Subtraction				
	8	16-17	2-Digit Subtraction	In this section, your child will continue to solve 2-digit subtraction problems. They will start with vertical subtraction in this section as well. Vertical subtraction is typically easier for some children as it allows them to line up the numbers being subtracted according to place value which helps them see the problem differently. You can still have your child breakdown the problems and solve them as they did in the earlier pages.
	9	18-19		
	10	20-21		The 2-digit numbers in this page set can be difficult for your child to subtract from using the method where they count backwards from the number being subtracted. This is where breaking down the numbers can come in handy. For example, $20 - 6$ can be broken down into $10 + 10 - 6$. This may be easier for your child to solve as they have practice with problems like $10 - 6$ which equals 4. Then they can add $10 + 4$, another mental calculation they should know and get 14, which is the solution to $20 - 6$.
	11	22-23		The goal of practicing subtraction at this level is to help your child develop the skills to solve 2-digit subtraction problems mentally. They can employ different problem solving strategies to solve each problem.

Date	Book Section	PP.	Description	Educator Notes
	12	24-25		Knowledge of single-digit subtraction problems is important to solving 2-digit problems as well. If your child can solve $9 - 4$, they can apply that knowledge to solve $19 - 4$. Remind your child of this strategy as they make their way through this workbook.
	13	26-27		In this page set, your child should look for the pattern between the problems. The problems on this page are designed to help your child find a pattern between similar subtraction problems that can help them solve the problems more easily. The goal is for your child to realize that $31 - 4$ and $41 - 4$ will produce similar answers of 27 and 37 respectively.
	14	28-29		These pages offer more practice with 2-digit by 2-digit subtraction problems. Here you can point out and remind your child about "borrowing" or "regrouping" when solving 2-digit by 2-digit subtraction problems. If the number being subtracted from in the ones place is smaller than the second number your child will have to borrow from the top number to solve the problem. In subtraction, borrowing happens when you subtract one number that is greater from another that is smaller. It is important that your child understand this method of subtraction when completing these pages.
	15	30-31		These pages offer continued practice with subtraction.
	16	32-33		
	17	34-35		
	18	36-37		
	19	38-39		In this section your child will continue to practice 2-digit by 2-digit subtraction. Remind your child to use the problem solving skills they developed earlier in this workbook or learned in the classroom to help them solve any difficult problems. It is important that your child knows how to breakdown the problems to make them easier to solve and knows how to "borrow" from the number being subtracted from in order to make the problem solvable.
	20	40-41		
	21	42-43		
	22	44-45		
Topic: 3-Digit Subtraction				
	23	46-47		This is the first section where your child will begin subtracting 2-digit numbers from 3-digit numbers. Have your child look at each problem on the page carefully and see if they can spot the pattern. This page uses problems with 3-digit numbers and 2-digit numbers that end in "0." This is to help your child understand place value and how to subtract from 3-digit numbers. For all of the problems on this page, a "0" will be in the ones place of the solution. You can then encourage your child to solve the first half of the numbers like a single-digit subtraction problem. For example, the problem $120 - 30$ can be solved like this: start in the "ones" column and move the "0" down as $0 - 0 = 0$. Then, look at the "hundreds" and "tens" place numbers on top as one number and the number in the "tens" place on the bottom as the number being subtracted from the top number. In this case the problem becomes $12 - 3$ which equals 9. Then move the 9 down to the "tens" place in the answer line. The final solution of $120 - 30$ is 90.
	24	48-49		In this page set, the problems get harder. Your child will have to pay attention to the numbers being subtracted from. Here you can remind your child to always start on the right and work their way to the left of the number as they subtract. They should first compare and subtract the numbers from the "ones" column and then the "tens" column and then the "hundreds" column as needed.
	25	50-51		It is good to remind your child that their understanding of 1-digit and 2-digit subtraction can be applied to 3-digit subtraction as well. For example, the problem $139 - 62$ can be broken down into smaller easier to solve problems. Encourage your child to start with the "ones" column and try $9 - 2$ which equals 7. Have them write 7 in the "ones" place. Then have your child focus on the "tens" column $3 - 6$. Your child should know this is not solvable and know they should borrow from the hundreds column. The problem then becomes $13 - 6$. This is a problem your child should be more familiar with solving from their practice earlier in this workbook. Your child can then solve $13 - 6$ and place the answer in the "tens" column. The answer then becomes 77.

Date	Book Section	PP.	Description	Educator Notes
	26	52-53		In this page set, your child will begin seeing problems where they have to borrow from the "tens" place to subtract in the "ones" place. Have your child review the explanation box on page 52 for a reminder of how to approach these problems.
	27	54-55		Here your child will continue to practice subtracting 3-digit numbers.
	28	56-57		
	29	58-59		
	30	60-61		
	31	62-63		Remind your child that, when they are subtracting, they should always move to the left. Always start with the smallest values. If you have a 3-digit number such as 145 they will start subtracting values from the ones column first. Then they will move to the tens and hundreds columns. If borrowing or regrouping is involved, they will take the borrowed value and place it in the column to the right. So, if they are subtracting numbers in the tens column and they needed to borrow a "1", they can remove "1" from the hundreds column.
	32	64-65		
	33	66-67		
Topic: Subtraction				
	34	68-69		This page set has your child revisit subtracting single digits from 2-digit numbers to prepare them for subtracting with larger numbers. It is always good to have your child review basic subtraction equations to keep their mental math skills sharp.
Topic: Subtraction of Tens				
	35	70-71		In this page set, your child will practice subtracting numbers by tens from larger numbers. In subtraction, any number minus "0" is the same number. For these problems your child can apply their knowledge of single digit subtraction because the number in the ones column will always equal "0." If your child has trouble with this concept of subtraction have them rewrite the problems in vertical form and tell them to look at the numbers in the tens or hundreds columns first. If they can subtract those two numbers and move the "0" in the ones column down they will find the correct answer. For example, if your child can solve $4 - 1$ then they can solve $40 - 10$ by subtracting "1" from "4" and moving the "0" down. This gives them the correct answer of "30."
	36	72-73		The concept of subtracting by tens becomes more difficult in this page set as the first number no longer ends in "0." However, your child should know that any number minus "0" equals the same number. This will help them solve these problems more easily. You can encourage your child to rewrite the problems vertically so they can better see how the numbers line up and which numbers they are subtracting from. For all the problems on this page, the number in the ones column will be the same as the number they are subtracting from. For example, in $67 - 60$ the "7" will move down to the answer line as $7 - 0 = 7$ and then $6 - 6$ in the tens column becomes "0." This means the answer is "7."
Topic: Subtraction of Hundreds				
	37	74-75		For this section, your child can apply the same subtraction rules as subtracting by tens. Remind your child that "0" minus any number equal that same number. It is also good to remind your child to line up the place value columns when subtracting numbers that end in "0." This will help them more easily solve subtraction problems with larger numbers.
	38	76-77		Your child will practice a mix of subtraction problems in this section. Some problems will be 3-digit by 3-digit subtraction and some problems will be 3-digit by 2-digit subtraction. Remind your child that it is important to line up the place values of the numbers being subtracted in order to get the correct answer.
	39	78-79		
Topic: Subtraction of Thousands				
	40	80-81		In this section, your child will subtract numbers by thousands. They might be intimidated by the large numbers, but you can remind them that subtracting by thousands is similar to subtracting 1- and 2-digit numbers. Once they line up the numbers by place value and move all the "0" down they can subtract the numbers in the thousands and hundreds columns just like they would subtract a 2-digit number.
	41	82-83		

Date	Book Section	PP.	Description	Educator Notes
Topic: Three Numbers				
	42	84-85	Mixed Calculations	<p>This section has your child completing mixed calculation equations. While they might be intimidated, you can remind your child that they have all the skills to solve these problems correctly. When solving equations with three numbers and mixed calculations prompt your child to solve the problems in parentheses first. Then use the answer to finish the problem by adding to it or subtracting from it as the equation requires.</p> <p>If the problem does not contain parentheses and the calculation symbols are the same, have your child work from left to right adding or subtracting the numbers in pairs. If the problem has different calculation symbols instruct your child to complete the addition problem first and then subtract from the sum of that equation.</p> <p>Although solving equations with three numbers can be challenging, your child has gained all the skills needed to solve them correctly in this workbook. If your child struggles, remind them of the problem solving skills they already practiced and encourage them to apply those skills to these problems.</p>
Topic: Review				
	43	86-87		<p>This is the final section of problems in this workbook. Encourage your child to apply the subtraction skills they have learned throughout this workbook to these final problems. If your child has difficulty with any of the problems in this section, have them revisit the corresponding sections in this workbook with similar problems for more practice.</p>
	AK	88-97		<p>Have your child refer to the Answer Key at the end of each page set to ensure they found the correct answers. If any of these answers are wrong, encourage your child to go back to that problem and try it again.</p>