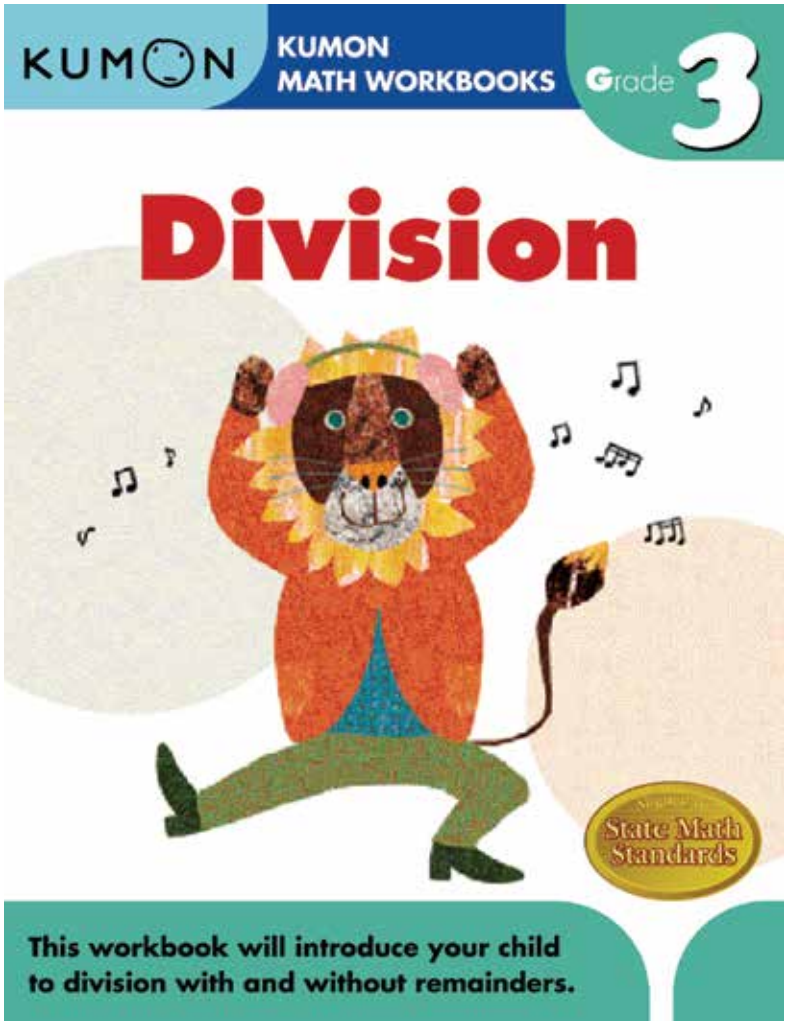
Kumon *Grade 3 Division* Workbook Educator's Guide



Using Kumon Calculations Workbooks: General Guidance

Kumon Word Problems 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 Word Problems 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
• 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	• 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
• 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
• 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. Kumon Workbooks are designed so the student "learns through doing"; therefore, the sequence of pages and

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 3 Division*, see the next page.

KUMON Grade 3 Division 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: Multiplication Review				
	1	2–3		This is the first section in this workbook. These pages are designed to test your child's mental multiplication skills. Reviewing multiplication helps ensure your child is ready for division problems. Having a strong understanding of multiplication tables is important for solving division problems.
	2	4-5		Multiplication review continues on these pages. Make sure your child is checking their answers to ensure they are getting the correct solutions. If your child knows their multiplication tables by heart it will help them with the division problems to come.
	3	6–7		In this page set, the number of multiplication review problems increases. It is okay to have your child only do one page per sitting if they struggle with the larger number of problems. Encourage your child and praise them when they are able to complete all the problems in this set correctly! Your child will build stamina as they work through this workbook which can help them work through more problems in one sitting.
	4	8–9		These page sets contain more multiplication review problems. Please make sure your child is solving each one correctly and checking their own answers. Encourage your child to try again if they get a problem wrong.
	5	10–11		
	6	12–13		
Topic : Inverse Multiplication				
	7	14–15		This section contains inverse multiplication problems that will help prepare your child for division. Have your child look at each problem carefully and fill the missing number in the box. By completing the multiplication sentence with the missing number or by using the solution to help solve the problem. Division can be seen as the opposite of multiplication. This is an important page set. Please make sure your child completes all the problems correctly. If your child struggles going forward with the division problems in this workbook, have them return to this page set and review again.
Topic: Division				
	8	16–17		This page set introduces division problems to your child. First, they will fill in the blank in the multiplication sentence. Then, they can use the completed multiplication sentence to fill in the blank in the division sentence using the same numbers. This activity will allow them to better see the connection between multiplication and division.
	9	18–19		Here your child will practice solving division problems for the first time in this book. Some problems may be unfamiliar like 0 divided by 4. Remind your child to look at the hint box which states "0 divided by any number is 0."
	10	20–21		As your child starts to solve the division problems in this workbook they may notice a pattern on some of the early pages. This pattern is designed to help your child see the connection between problems with the same divisor. A number divided by 5 will be 5 less than the previous number divided by 5. This is where your child's understanding of multiplication tables can help them greatly. Remind your child that division problems are the inverse or opposite of multiplication problems.
	11	22–23		
	12	24-25		
	13	26-27		
	14	28–29		For some division problems it can be helpful to have your child draw dots and divide them by circling groups by the divisor to help visualize how the main number is being divided. For example, if the problem is "20 divided by 5" have your child draw 20 dots on a separate sheet of paper. Instruct them to circle the dots in groups of five. Then, count how many groups of five they can make. The number of groups of five they can circle is the same as the answer to "20 divided by 5" which is 4.

Date	Book Section	PP.	Description	Educator Notes
	15	30–31		Over the next few page sets, your child will continue to practice their division skills. Remind them to use their mental multiplication skills when they get stuck on a division problem. You can also remind them to try and draw out the problem on a separate sheet of paper if needed.
	16	32–33		
	17	34–35		
Topic: Division with Remainders				
	18	36–37		This page set will introduce your child to division problems with remainders or leftover numbers. Until now, the numbers your child was dividing have worked out evenly. The problems on this page will introduce the concept of dividing larger numbers by a smaller number that does not work out evenly. These problems take the form of word problems to help your child see this change for easily. The concept behind this idea is that by connecting the numbers in the problems to real objects your child can better understand how to divide a number or group of objects and still have some leftover. It is easier for children to understand the idea of remainders this way.
	19	38–39		In this page set, your child will continue to practice division with remainders. Here the problems are presented as equations and not word problems. This will help your child practice solving division problems with remainders without support of concrete objects in the word problems. You can encourage your child to draw the number of dots and circle them by group as recommended earlier in this guide. It can help them solve the division problems more easily using visuals.
	20	40–41		For the next few page sets, your child will continue to practice division problems with remainders. Remind your child that a remainder is always a smaller number than the divisor. If the remainder is larger than the divisor than the number can be divided one or more times which makes the answer increase by one or two digits.
	21	42–43		
	22	44–45		
	23	46–47		Don't forget to encourage your child to check their answers using the answer key at the back of this workbook once they finish a page set. If they got an wrong answer for any of the problems, they should go back and try again. By encouraging your child to review and correct their mistakes, you can train them to be more independent learners.
	24	48–49		These page sets will offer your child more standard division problems to solve.
	25	50–51		
	26	52–53		
	27	54–55		
	28	56–57		
	29	58–59		
	30	60–61		
	31	62–63		
	32	64–65		
	33	66–67		
Topic: Vertical Form Division				
	34	68–69		This page set is the start of the vertical division section. The format will familiarize and prepare your child for long division. While the problems your child will solve are still simple division problems with and without remainders, the format will help prepare them for long division. Remind your child to look at the whole number in the box when dividing. They will not be dividing the numbers in each place value by the divisor in this section.
	35	70–71		These page sets will offer your child more vertical division problems to solve.
	36	72–73		
	37	74-75		
	38	76-77		

Date	Book Section	PP.	Description	Educator Notes
Topic: Division with Large Numbers				
	39	78-79		In this section your child will practice dividing larger numbers. These are numbers where your child needs to take place value into account. Have your child look at the numbers in the hundreds or tens columns first. If they are dividing a 3-digit number by a single-digit number have them treat the number in the hundreds and tens places as a 2-digit number. Once they determine how many times the divisor goes into that 2-digit number they can write the number in the tens place in their answer. The next step is to have your child write the remainder of that division problem so it lines up with the number in the tens or ones column of the 3-digit number being divided. This is where your child completes a second division problem to see how many more times the divisor can go into the larger number. Once they solve this problem they will be left with the 2-digit answer to the original problem.
	40	80-81		Another way to have your child approach division with larger numbers can be done with long division. First, have your child write the problem in long division format. For example, "1000 / 2." The next step is to have your child determine the smallest number to the left of the dividend (the number being divided.) In this step, your child can write down how many times 10 can be divided by 2. In this case the answer is 5. If they tried 6 that would be 12, which is bigger than 10 and would not work. Next, have your child write 10 underneath the 10 because 5 x 2 = 10. Then, they can subtract 10 from 10. This equals 0, which they write down in the hundreds place. The following step is to move down the next zero in the tens place and see how many times 2 goes into "00." As your child learned earlier in this book, 0 divided by anything equals 0, so they can write 0 down in the tens place of the answer. Your child can repeat this step for the "0" in the ones place of 1000 and come up with the same answer. Finally, once all the 0 are divided by 2 your child will have the final answer which is 500.
	41	82-83		This page set will offer your child more division problems with large numbers to solve.
	42	84-85		Another way for your child to approach the long division problems in this page set is to look at the problems as if they are dividing the numbers in thousands and hundreds places by each other. Then, they can add the correct number of zeros to the end of the sum. For example, if your child treats "800 / 200" like "8 / 2" and adds a zero to the end they will come up with the correct answer of "40" for this problem. This trick only works for numbers that end in zeros.
Topic: Review				
	43	86-87		This section will have your child review all of the division problems they practiced throughout this workbook. If your child still has trouble with a certain type of problem in this review section, you can have them go back to that page set in the workbook and try a few more of each type of division problem. Remind your child to apply the division skills and tips taught in this guide to help them solve all the review problems correctly.
Answer Key				
		88-96	**Answer Key**	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 their answers are wrong, encourage your child to go back to that problem and try it again.