# Kumon Grade 4 Division Workbook Educator's Guide 

Using Kumon Calculations Workbooks: General Guidance ..... 2
Daily Guide: Grade 4 Division ..... 4


## 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

- 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


## Using Kumon Workbooks

for additional support

- 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 4 Division, see the next page.

## KUMON Grade 4 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.

KUMON
PUBLISHING

| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
| TOPIC: Addition \& Subtraction Review |  |  |  |  |
|  | 1 | 2-3 |  | The first page set in this workbook has your child practice addition and subtraction problems to prepare them for the division problems. Addition and subtraction are basic foundations for math and mastery of these concepts will help your child as they practice their division skills. |
| Topic: Multiplication and Division Review |  |  |  |  |
|  | 2 | 4-5 |  | This section provides your child with review of multiplication and division problems with 2-digit numbers. Solving these review problems will help prepare your child for the more advanced problems in this workbook. |
| Topic: Mixed Review |  |  |  |  |
|  | 3 | 6-7 |  | This page set provides extra practice with all forms of calculation practiced on the previous pages to help prepare your child for the rest of this workbook. |
| Topic: 2-Digits / 1-Digits |  |  |  |  |
|  | 4 | 8-9 |  | This first page set has example boxes to help your child breakdown the division problems so they are easier to solve. The step-by-step sample shows how to write horizontal problems in vertical form. This can also help prepare your child for long division. |
|  | 5 | 10-11 |  | It is important to remind your child the basics of division as needed in this workbook. For example, problem \#1 on this page is a standard division problem 24 divided by 3 . Your child should be able to solve this problem using their knowledge of multiplication. If your child struggles with this first problem encourage them to recall their three times tables. With or without prompting, your child should be able to recall that $3 \times 8=24$ and infer that $24 / 3=8$. |
|  | 6 | 12-13 |  | As this workbook continues, your child will have more practice applying their multiplication knowledge to solving division problems. For example, problem \#2 on this page is 56 / 4. Your child will have to start by seeing how many times 4 goes into the 5 in the tens place of 56.4 goes into 5 once and so they can write the 1 above the 5 . Then, they would bring down the 1 that is leftover from $5-4$ as well as the " 6 " in the ones place of 56 . After this, the second part of the problem becomes "how many times does 4 go into 16." The answer to that is " 4 " as $4 \times 4=16$. The final step would be to place " 4 " on the top line with the "1" from the first part of the problem. This will give your child the answer to 56 $/ 4$ which is 14 . |
|  | 7 | 14-15 |  | The next few page sets offer your child more practice dividing 2-digit numbers |
|  | 8 | 16-17 |  | by 1-digit numbers. |
|  | 9 | 18-19 |  |  |
| Topic: 3-Digits / 1-Digits |  |  |  |  |
|  | 10 | 20-21 |  | This is the first page set in this section. Here your child will begin to solve division problems with 3 -digit numbers divided by 1 -digit numbers. The first problem has boxes on top of the division symbol in order to show that the answer will be a 3-digit number. Have your child use this hint to solve the first problem. Remind your child that the same steps they used to solve 2-digit by 1digit problems can be applied to solving these problems. |
|  | 11 | 22-23 |  | In this page set, there are some problems where the divisor does not go into all of the digits of the dividend and a " 0 " will need to be placed in the corresponding place in the quotient. The first few examples of this are shown on the page to help your child make the connection. |
|  | 12 | 24-25 |  |  |


| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
|  | 13 | 26-27 |  | Remind your child to check their answers at the end of each page set. If there are any problems that they missed encourage them to try the problem again. |
|  | 14 | 28-29 |  | In this page set, your child will come across a division problem where the divisor does not fit into the dividend evenly. This will result in the problem having a remainder. If your child is not familiar with this concept, remind them that some numbers do not fit into each other evenly and that the number leftover is called a remainder. |
|  | 15 | 30-31 |  | These pages will provide your child with more practice problems. |
| Topic: 4-Digits / 1-Digits |  |  |  |  |
|  | 16 | 32-33 |  | This page set will give your child practice with 4-digit by 1-digit division problems. Remind your child that they can apply the same method they used when dividing 3 -digit by 1 -digit numbers. |
|  | 17 | 34-35 |  | These pages will provide your child with more practice problems. |
| Topic: 3-Digits / 2-Digits |  |  |  |  |
|  | 18 | 36-37 |  | In this set of pages, your child will practice division of 3-digit numbers by 2digit numbers. You can remind your child that this form of division is similar to the division problems they worked through earlier in this workbook. They can apply the same method of seeing how many times the divisor goes into the dividend. |
|  | 19 | 38-39 |  | When dividing 3-digit by 2-digit numbers, your child will have to use their multiplication skills. Determining how many times a number can be divided by another will require strong knowledge of multiplication. Remind your child that if the sum of the multiplication problem is less than the number being divided they should try again with a number one degree larger to make sure that it does not fit into the dividend more evenly. |
|  | 20 | 40-41 |  | It is also important to remind your child that most of these problems will have a remainder. It is okay for long division problems to have numbers leftover. Make sure they write "R" for remainder and the leftover number beside the quotient for each problem where they occur. |
|  | 21 | 42-43 |  | These pages provide your child with more practice problems to solve. |
|  | 22 | 44-45 |  |  |
|  | 23 | 46-47 |  |  |
|  | 24 | 48-49 |  |  |
|  | 25 | 50-51 |  |  |
|  | 26 | 52-53 |  | With more practice your child will be able to easily choose which number to begin with when dividing a larger number. Until then, remind them that it is okay to choose one number, complete the multiplication calculations, and then to repeat the process if the number chosen to go into the dividend is too small. This is part of the process of solving a division problem. |
|  | 27 | 54-55 |  | These pages will provide your child with more division practice. Encourage your |
|  | 28 | 56-57 |  | child to take their time and ensure they are solving each problem correctly. |
|  | 29 | 58-59 |  | Once they have checked all their answers in a page set, they can move on to the |
|  | 30 | 60-61 |  | next. |
|  | 31 | 62-63 |  |  |
| Topic: Checking the Answer |  |  |  |  |
|  | 32 | 64-65 |  | This page set will give your child practice checking their answers and learning how to review their work on their own. The steps ask your child to solve the division problem and then "recalculate" the answer by using multiplication. By multiplying the numbers found when solving the division problems your child can see the connection between division and multiplication. This will help them when solving division problems with all types of numbers. |
| Topic: 3-Digits / 2-Digits |  |  |  |  |
|  | 33 | 66-67 |  | For the next few page sets, your child will continue to practice division problems with 3-digits by 2-digits numbers. Remind your child that they should always make sure the divisor is smaller than the number being divided. Additionally, it is important to make sure your child includes the remainder, if any, in the final answer. |
|  | 34 | 68-69 |  |  |
|  | 35 | 70-71 |  |  |


| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
| Topic: 4-Digits / 2-Digits |  |  |  |  |
|  | 36 | 72-73 |  | This is the first page set where your child will solve 4-digit by 2-digit division problems. These problems will result in larger quotients as the smaller 2-digit numbers will go into the 4-digit dividends more times than a 3-digit number. The first problem on this page also has guide boxes to help your child solve the first problem. |
|  | 37 | 74-75 |  |  |
|  | 38 | 76-77 |  |  |
| 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 thousands or hundreds columns first. If they are dividing a 3-digit number by a 2-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 |  | It is important to also remind your child that when dividing with larger numbers they are more likely to have a larger remainder at the end of the problem. This is okay. Please encourage your child to write the remainder at the top of the division sentence when they are finished solving it. |
| Topic: Mixed Calculations |  |  |  |  |
|  | 41 | 82-83 |  | This section will introduce your child to mixed calculations. It is important to remind your child about the Order of Operations when solving problems like these. For example, they should always begin by solving the problem set inside a set of parentheses first. Next, divided or multiply, then add or subtract. The order in which they solve these types of problems will help them get the correct answer. |
|  | 42 | 84-85 |  |  |
| 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. |
|  |  |  |  |  |

