## Kumon Grade 3 Multiplication Workbook Educator's Guide

Using Kumon Calculations Workbooks: General Guidance ..... 2
Daily Guide: Grade 3 Multiplication .....  4


## 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

- 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 3 Multiplication, see the next page.


| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
|  | 6 | 12-13 | Focusing on $2 \times$, Stage 2: <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types | Stage 2 engages pattern recognition and calculation ability by presenting number facts in various kinds of sequences -- not just the standard memorized order. This practice helps your child learn different strategies for calculating answers to multiplication problems, which they can rely on as they build up their memorized knowledge. It also promotes deeper understanding of the multiplication concept. <br> If your child has difficulty, encourage them to build on their answers to the other problems in the section. For example, you can say: If $2 \times 5=10$, like you answered in problem 1, what is $2 \times$ 6? How could you "get from" $2 \times 5$ to $2 \times 6$ ? |
|  | 7 | 14-15 | Focusing on $2 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor | Stage 3 takes away some of the previous memory supports and has your child work problems out of sequence. Discourage your child them from looking back at answers from another page. It's important for your child to try to generate the answers on their own. <br> Missing factor problems at the end of this stage prompt your child to use their knowledge in a new way and to apply algebraic reasoning skills. |
| TOPIC: $3 \times$ TABLES |  |  |  |  |
|  | 8 | 16-17 | Focusing on $3 \times$, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | After completing the previous section on $2 \times$, your child will be more familiar with the stages for learning each set of times tables. Please return to the supports listed above for the $2 x$ tables as your child continues to work through the book, advancing from one times table to the next. |
|  | 9 | 18-19 | Focusing on $3 \times$, Stage 2: <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 10 | 20-21 | Focusing on $3 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |
| TOPIC: REVIEW $2 \times$ AND $3 \times$ TABLES |  |  |  |  |
|  | 11 | 22-23 | Review of the 2 s and 3 s times tables <br> - Solving problems in varying sequences and out of sequence <br> - Missing factor problems | This review addresses both the $2 \times$ and $3 \times$ tables using question types your child has seen in previous sections. As with all reviews in this book, this is a place to pause and assess whether your child is ready to move on. <br> If your child makes several mistakes, determine whether they are for $2 \times$ problems, $3 \times$ problems, or both. Then provide additional practice where needed before moving on. A good option is to simply erase earlier completed sections in the book and have your child redo them again in order. You can use this approach for any revew in this book. |


| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
|  | 12 | 24-25 | Focusing on $4 \times$, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Please return to the supports listed above for the $2 \times$ tables as your child continues to work through the book, advancing from one times table to the next. |
|  | 13 | 26-27 | Focusing on $4 \times$, Stage 2 : <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 14 | 28-29 | Focusing on $4 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |
|  | TOPIC: $5 \times$ Tables |  |  |  |
|  | 15 | 30-31 | Focusing on $5 \times$, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Please return to the supports listed above for the $2 \times$ tables as your child continues to work through the book, advancing from one times table to the next. |
|  | 16 | 32-33 | Focusing on $5 \times$, Stage 2 : <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 17 | 34-35 | Focusing on $5 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |
| TOPIC: REVIEW $4 \times$ AND $5 \times$ TABLES |  |  |  |  |
|  | 18 | 36-37 | Review of the 4s and 5s times tables | This review addresses both the $4 \times$ and $5 \times$ tables using question types your child has seen in previous sections. Please return to the supports listed for the $2 \times$ and $3 \times$ review above. |
| TOPIC: REVIEW $2 \times, 3 \times, 4 \times$, and $4 \times$ TABLES |  |  |  |  |
|  | 19 | 38-39 | Review of the $2 \mathrm{~s}, 3 \mathrm{~s}, 4 \times$ and 5 s times tables | This review addresses all times tables studied so far. It also introduces a new activity type: the multiplication grid. Some of the numbers in the grid are filled in for support. These supports are gradually reduced each time your child returns to the activity. Multiplication grids are great not only for working on memorization but also for promoting pattern recognition skills and number sense. <br> If your child already feels somewhat comfortable with multiplication, you might challenge them to complete their own $2 s$ through $5 s$ multiplication grid on a blank sheet of paper. |
| TOPIC: $6 \times$ TABLES |  |  |  |  |
|  | 20 | 40-41 | Focusing on $6 \times$, Stage 1 : <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Please return to the supports listed above for the $2 \times$ tables as your child continues to work through the book, advancing from one times table to the next. |


| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
|  | 21 | 42-43 | Focusing on $6 \times$, Stage 2 : <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 22 | 44-45 | Focusing on $6 \times$,Stage 2 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |
| TOPIC: $7 \times$ TABLES |  |  |  |  |
|  | 23 | 46-47 | Focusing on $7 \times$, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Please return to the supports listed above for the $2 \times$ tables as your child continues to work through the book, advancing from one times table to the next. |
|  | 24 | 48-49 | Focusing on $7 \times$, Stage 2 : <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 25 | 50-51 | Focusing on $7 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |
| TOPIC: REVIEW $6 \times$ AND $7 \times$ TABLES |  |  |  |  |
|  | 26 | 52-53 | Review of the 6 s and 7s times tables <br> - Solving problems in varying sequences and out of sequence <br> - Missing factor problems | This review addresses both the $6 \times$ and $7 \times$ tables using question types your child has seen in previous sections. Please return to the supports listed for the $2 \times$ and $3 \times$ review above. |
| TOPIC: REVIEW $2 \times$ through $7 \times$ |  |  |  |  |
|  | 27 | 54-55 | Review of $6 \times, 7 \times, 8 \times$ and $9 \times$ | This review addresses all times tables studied so far and includes a partially filled in multiplication grid. <br> If your child already feels somewhat comfortable with multiplication, you might challenge them to complete their own 2 s through 7 s multiplication grid on a blank sheet of paper. |
| TOPIC: $8 \times$ Tables |  |  |  |  |
|  | 28 | 56-57 | Focusing on $8 \times$, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Please return to the supports listed above for the $2 \times$ tables as your child continues to work through the book, advancing from one times table to the next. |
|  | 29 | 58-59 | Focusing on $8 \times$, Stage 2: <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 30 | 60-61 | Focusing on $8 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |


| Date | Book Section | PP. | Description | Educator Notes |
| :---: | :---: | :---: | :---: | :---: |
|  | TOPIC: 9× TABLES |  |  |  |
|  | 31 | 62-63 | Focusing on $9 \times$, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Please return to the supports listed above for the $2 \times$ tables as your child continues to work through the book, advancing from one times table to the next. |
|  | 32 | 64-65 | Focusing on $9 \times$, Stage 2 : <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence <br> - Reading and filling in, out of sequence <br> - Solving problems, varying sequence types |  |
|  | 33 | 66-67 | Focusing on $9 \times$, Stage 3 : <br> - Reading and filling in without provided answers, out of sequence <br> - Solving problems, varying sequence types <br> - Solving problems, shuffled order <br> - Solving problems, missing factor |  |
| TOPIC: REVIEW $8 \times$ AND $9 \times$ TABLES |  |  |  |  |
|  | 34 | 68-69 | Review of $8 \times$ and $9 \times$ | This review addresses both the $8 \times$ and $9 \times$ tables using question types your child has seen in previous sections. Please return to the supports listed for the $2 \times$ and $3 \times$ review above. |
| TOPIC: REVIEW $2 \times$ THROUGH $9 \times$ |  |  |  |  |
|  | 35 | 70-71 | Reviews of $2 \times$ through $9 \times$ <br> - Calculations problems | These reviews address all times tables, 2 through 9, using question types your child has seen in previous sections. There are 3 reviews in a row. Be sure to stop and check answers after each review. Have your child review any problems they missed before moving on. |
|  | 36 | 72-73 |  |  |
|  | 37 | 74-75 |  |  |
|  | 38 | 76-77 | Review of $2 \times$ through $9 \times$ <br> - Multiplication grid | This review consists of multiplication grids. With each subsequent grid, fewer numbers are filled in, making each step a little more challenging. For an added challenge, have your child identify patterns in the numbers that are filled in within each grid. The last grid contains only perfect squares, as in 2 times itelf is 4, 3 times itself is 9, 4 times itself is 16 , and so on. |
| TOPIC: $1 \times$ AND $10 \times$ TABLES |  |  |  |  |
|  | 39 | 78-79 | Focusing on $1 \times$ : <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Allow your child to work independently through this section, using the problem-solving skills they've developed in this book. This will help them develop an understanding of what multiplying by 1 means, even if eventually they identify an "easy recipe" for solving these problems. <br> At the conclusion of this section, you can discuss with your child that 1 times any number is that same number. Have them explain to you why this is the case. |
|  | 40 | 80-81 | Focusing on 10×, Stage 1: <br> - Skip counting <br> - Tracing and reading, in sequence <br> - Reading and filling in, in sequence <br> - Solving problems, mainly in sequence | Allow your child to work independently through this section, using the problem-solving skills they've developed in this book. This will help them develop an understanding of what multiplying by 10 means, even if eventually they identify an "easy recipe" for solving these problems. <br> At the conclusion of this section, you can discuss with your child that 10 times a number is the same number but "shifted over," so the 1 s place becomes the 10 s place, and so on. Challenge your child to explain why this is the case. You can encourage them to use manipulatives or drawings to aid in their explanation. The essential point underlying the discussion is that our place value number system is base 10. |
|  | 41 | 82-83 | Review of $1 \times$ and $10 \times$ | This review addresses both the $1 \times$ and $10 \times$ tables using question types your child has seen in previous sections. Please return to the supports listed for the $2 \times$ and $3 \times$ review above. |
| TOPIC: COMMUTATIVE PROPERTY AND FINAL REVIEW |  |  |  |  |

## Educator Notes

42 84-85 This book concludes with an introduction to the Now that your child is learning about the commutative property, concept of the commutative property and a final you can point out that this is an extra tool they can use when review of all times tables working with multiplication facts. If they are stumped by a certain fact, they can try reversing the order of the factors. Be sure your child checks their final answers and reviews any that they missed. Your child can repeat this and similar reviews as many times as needed until they can earn a perfect score.

