## PARENTS: Complete the Setup Instructions:

The Second Edition of Saxon $5 / 4$ is out of print. The Third Edition of Saxon 5/4 is the current and recommended edition.
$\square$ PARENTS: Watch this Updated Getting Started video with your child.
Print and read the Student Instruction Sheet and Assignment Chart
Read Memorizing Multiplication Facts.
Critical: Use our frustration free Timed Method, described under Assignment Chart on page 2.
$\square$ Determine the number of homework problems your student should do by reading the Mixed Practice Section on page 3.

Notebook for notes and homework. Some prefer large grid graph paper or unlined paper (spiral drawing book).
$\square$ Calculators: Use of a standard calculator is allowed only on very large numbers (10,000 or greater), really small numbers (. 0001 or less).

Bookmark this Guide for easy reference.
Review the remaining pages of this guide as needed.

# Need help accessing or viewing the DIVE video lessons? 

## Stream \& Download Access Instructions \& Tech Support

VHX: Error SystemTimed Out: Follow these Steps

CD-ROM Access Instructions \& Tech Support

## How to Use DIVE Math 5/4, 2nd Edition

## What's Inside?

## Syllabus

The DIVE syllabus organizes assignments on a 32 week schedule. There are two types of assignments: lessons and tests. At the beginning of the year, you will typically have 5 assignments. As the year progresses and the concepts become more complex, there are only 3 to 4 assignments.

## Lessons

Each lesson is made up of four parts: DIVE Lecture, Saxon Facts Practice, Saxon Lesson Practice, and Saxon Mixed Practice. The DIVE lecture number corresponds with the assigned Saxon lesson for that day. So, if you are assigned Lesson 4, you will watch DIVE Lecture 4 and complete Saxon Lesson 4 in the Saxon Student Textbook.

## DIVE Video Lectures Ensure Understanding

Did you know the lesson in the Saxon textbook is not the complete lesson? John Saxon designed his program to be taught in a public school classroom by a trained Saxon instructor. The lesson in the book is review for the student. If you read the lesson in the book, you are missing important information. Think of the DIVE lectures as going to class. Don't skip class!

## Saxon Facts Practice Sheets Increase Recall Speed

After the DIVE lecture, open the Saxon student textbook to the assigned Saxon lesson. At the top is a small box. The first line indicates which Facts Practice sheet to complete. Facts Practice sheets are found in the Saxon Tests \& Worksheets booklet. Facts sheets are an essential part of the DIVE/Saxon program and should be completed each time they are assigned. The FAQ section explains how to help students who struggle with math facts.

## Saxon Lesson Practice Develops Fluency

Next, the Lesson practice section is completed. With 5-10 problems, this section provides practice on the new concept introduced in the DIVE lecture. Students should review the DIVE lesson as necessary.

## Saxon Mixed Practice Builds Long-term Retention

Finally, the Mixed Practice section is completed. It provides more than enough review of previously learned concepts. Saxon's unique method of continual review (not spiral) means the student is either practicing the concept in the mixed practice or building on it in the new lesson. Practicing a concept daily over a long period of time has been proven to build long-term retention which increases recall speed and raises exam scores.

Students will often forget a concept in this section. Don't be concerned about this. The important thing is to quickly re-learn the forgotten concept. A lesson reference number is in
parentheses next to each problem that indicates which lesson that concept was taught in. When "stuck" on a problem, simply click on that DIVE lesson to quickly re-learn that concept. Better than an answer this gives students the opportunity to apply what was just learned, building long-term retention.

If you "help" your student by showing them how to do the problem correctly, you are removing the opportunity to build retention. This will make math harder. However, if you take the time to re-learn forgotten concepts properly, the student will eventually build fluency. This makes math faster and easier.

Rarely, after re-watching the DIVE lecture, the student may not understand. Mark the problem wrong and go to the next problem. It will be corrected during the grading step.

## Saxon Solutions Manual Provides Step-by-Step Solutions

This book contains step-by-step solutions to every lesson, test, and facts sheet question. Use this book to grade these components. For details on grading, see Homework and Test Grades on page 3.

## Investigations

Because they were added to meet specific public school standards, we recommend skipping the Investigations. The DIVE course does not include lectures for Investigations.

## Tests

Approximately every 5 lessons or so there is a test. They are at the back of the Saxon Tests \& Worksheets booklet. The tests are cumulative, which means there are concepts from previous lessons. The number in parentheses next to each problem indicates which lesson that concept was taught in. This makes for quick and easy re-learning of missed concepts.

## Recommended Weekly Schedule

On average, 3 to 4 lessons are completed each week. Each lesson has 30 homework problems. However, most DIVE students do not need this much practice. Following is a method that works well for reducing the amount of practice while maintaining fluency and building long-term retention. If test scores drop below an 80 or 85 , this means the student needs more practice and should increase the number of homework problems. To avoid overwhelming your child, do not spend more than an hour or so (depending on age). Regardless of how much of the lesson is completed, stop and pick up where you left off the next day. Eventually, your student will build retention and fluency and complete their lessons

## Odd \& Even + 5 Schedule

With this schedule students watch the DIVE lecture, complete the Facts Practice, and Lesson Practice normally. But in the Mixed Practice sections you complete the odd numbered problems on odd numbered lessons and even numbered problems on even lessons. If you have a very strong math student, 15 problems may be enough review. Typically 15 problems do not provide enough review for most students to build fluency. Therefore, we recommend adding 3-5 more problems from the most recent lessons (see the lesson reference number is parentheses next to each problem). For example, if you are on lesson 65, you would do all the odd numbered problems in the Mixed Practice section. Then circle $3-5$ problems that have $65,64,63,62$, in parentheses next to the problem. This will add a review on the most recently learned concepts.

## New to DIVE or Saxon Math?

The first 30 lessons of each Saxon text are review and move fairly quickly. However, if you are new to Saxon/DIVE, these lessons may not be review. During these lessons, we recommend new students complete one-half lesson per day. For example, you could watch the DIVE lecture, do the Lesson Practice, and complete the first 7-10 problems in the Mixed Practice section. The next day complete the remaining homework problems then grade and correct. This will allow extra time to learn these concepts and build retention. After the first 30 lessons or so, use the recommended weekly schedule listed above.

## Homework \& Test Grades

Don't be concerned about the number of missed homework problems. Students are expected to miss or "forget" some of the concepts. However, the continual "reminder" of doing the problem correctly, over a long period of time, will eventually build long-term retention. If all the homework is completed, graded and corrected, the student should receive a 100. We prefer the student grade and correct their daily work as that is part of the learning process.

Test scores are the best indicator of understanding. Tests should be graded by a parent with $1 / 2$ credit given for missed problems in which the student can find their mistake. This gives the student an incentive for showing their work. If test scores drop below an 80 or 85 , increase the number of homework problems assigned and slow the pace down. When test scores go up, you can try reducing the number of homework problems.

To calculate a final grade, find the average for each column (sum of all grades divided by the
number of grades) add all the grades in one column and divide by the number of grades). Then use the following formula to calculate the final grade.

Final Grade $=($ Total Homework Average x .20$)+($ Total Test Average x .80)

## Grading Scale

A - 90-100
B -80-89
C - 70-79
D - 60-69
F - 59 or below
I - Incomplete

## Assignment Chart for Math 5/4, 2nd Edition

## Students should watch the DIVE lecture before each Saxon lesson. DON'T SKIP CLASS!

## Daily Schedule

## 1. View the DIVE Syllabus

to determine which lesson to complete.

## 2. Watch the DIVE lecture

that corresponds with the assigned Saxon lesson. You should not be looking at the textbook during the lecture. Instead, you should take notes and work problems with Dr. Shormann, pausing and rewinding until you understand.

## 3. Complete Lesson Practice

in the Saxon textbook. Re-watch the DIVE lecture as needed.

## 4. Complete Mixed Practice

If you get stuck on a problem, rewatch the DIVE lecture (printed in parentheses next to each question). Typically there is a practice problem like the one you are attempting. Then try to do the problem again. If you can't, mark the problem wrong and move on. You will correct it in the next step.

## 5. Grade \& correct homework daily

In the lower grades, parents should grade homework (not correct) and the child should correct it before going to the next lesson. To correct missed problems:
A. Check your work on all missed problems and see if you can figure out the correct answer.
B. For those you can't, re-watch the DIVE lecture (printed in parentheses next to each problem) and try to correct again.
C. For those you can't, look at the Solutions Manual and see if you can figure out what you did wrong.
D. For those you still don't understand, email Dr. Shormann and he will help you.
At first, this can be a time consuming process but be patient and eventually you will build long-term retention. Then math will go faster and your test scores will be higher!

## TESTS

Study for tests by working a few problems from the lessons listed on the syllabus. After a parent grades the test, correct it like this:

1. Try to correct any problems you can without looking at your book, lectures, etc. Problems corrected this way will be awarded $1 / 2$ credit. 2. Correct all other problems using the steps listed under Grade \& Correct Homework Daily.

| Week | Lessons | Test |
| :---: | :---: | :---: |
| 1 | 1-5 |  |
| 2 | 6-10 | Test 1 (1-5) |
| 3 | 11-15 | Test 2 (6-10) |
| 4 | 16-20 | Test 3 (11-15) |
| 5 | 21-25 | Test 4 (16-20) |
| 6 | 26-30 | Test 5 (21-25) |
| 7 | 31-35 | Test 6 (26-30) |
| 8 | 36-40 | Test 7 (31-35) |
| 9 | 41-44 |  |
| 10 | 45-48 | Test 8 (36-40) |
| 11 | 49-52 | Test 9 (41-45) |
| 12 | 53-56 | Test 10 (46-50) |
| 13 | 57-60 | Test 11 (51-55) |
| 14 | 61-64 |  |
| 15 | 65-68 | Test 12 (56-40) |
| 16 | 69-72 | Test 13 (61-65) |
| 17 | 73-76 | Test 14 (66-70) |
| 18 | 77-80 | Test 15 (71-75) |
| 19 | 81-84 |  |
| 20 | 85-88 | Test 16 (76-80) |
| 21 | 89-92 | Test 17 (81-85) |
| 22 | 93-96 | Test 18 (86-90) |
| 23 | 97-101 | Test 19 (91-95) |
| 24 | 102-106 | Test 20 (96-100) |
| 25 | 107-111 | Test 21 (101-105) |
| 26 | 112-116 | Test 22 (106-110) |
| 27 | 117-121 | Test 23 (111-115) |
| 28 | 122-126 | Test 24 (116-120) |
| 29 | 127-131 | Test 25 (121-125) |
| 30 | 132-136 | Test 26 (126-130) |
| 31 | 137-141 | Test 27 (131-135) |
| 32 | - | Test 28 (136-140) |

Grade Recording Form
Student Name $\qquad$ School Year $\qquad$
Course Name $\qquad$ Final Grade $\qquad$

| Week | Lessons | Homework Average | Test | Test Grade |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1-5 |  |  |  |
| 2 | 6-10 |  | Test 1 (1-5) |  |
| 3 | 11-15 |  | Test 2 (6-10) |  |
| 4 | 16-20 |  | Test 3 (11-15) |  |
| 5 | 21-25 |  | Test 4 (16-20) |  |
| 6 | 26-30 |  | Test 5 (21-25) |  |
| 7 | 31-35 |  | Test 6 (26-30) |  |
| 8 | 36-40 |  | Test 7 (31-35) |  |
| 9 | 41-44 |  |  |  |
| 10 | 45-48 |  | Test 8 (36-40) |  |
| 11 | 49-52 |  | Test 9 (41-45) |  |
| 12 | 53-56 |  | Test 10 (46-50) |  |
| 13 | 57-60 |  | Test 11 (51-55) |  |
| 14 | 61-64 |  |  |  |
| 15 | 65-68 |  | Test 12 (56-40) |  |
| 16 | 69-72 |  | Test 13 (61-65) |  |
| 17 | 73-76 |  | Test 14 (66-70) |  |
| 18 | 77-80 |  | Test 15 (71-75) |  |
| 19 | 81-84 |  |  |  |
| 20 | 85-88 |  | Test 16 (76-80) |  |
| 21 | 89-92 |  | Test 17 (81-85) |  |
| 22 | 93-96 |  | Test 18 (86-90) |  |
| 23 | 97-101 |  | Test 19 (91-95) |  |
| 24 | 102-106 |  | Test 20 (96-100) |  |
| 25 | 107-111 |  | Test 21 (101-105) |  |
| 26 | 112-116 |  | Test 22 (106-110) |  |
| 27 | 117-121 |  | Test 23 (111-115) |  |
| 28 | 122-126 |  | Test 24 (116-120) |  |
| 29 | 127-131 |  | Test 25 (121-125) |  |
| 30 | 132-136 |  | Test 26 (126-130) |  |
| 31 | 137-141 |  | Test 27 (131-135) |  |
| 32 | - |  | Test 28 (136-140) |  |
|  | Homework |  |  |  |
|  |  |  |  |  |

