# Elementary Mathematics Grade 4 A v7.0 – Syllabus

## Course Name

MATHG4-A

Elementary Mathematics Grade 4 A v7.0 – Semester A

## Course Information

MATHG4-A is the first semester of this two-semester course.

In Math Grade 4, students will multiply and divide multi-digit whole numbers using different strategies and a standard algorithm. The course provides the opportunity for students to see the relationship between fractions and decimals and introduces addition and subtraction of each. Using a protractor to draw and measure angles is another focus of the course. Other engaging activities include learning about measurement and using median, mode, and range as ways to interpret data.

## Course Delivery Method

Online

## Contacting Your Instructor

You may contact your instructor using your Canvas Inbox. Technical support is available 24/7 at TTU K-12.

## Course Topics

After completing this course, the students should have increased knowledge of
- using place value patterns
- reading and writing whole numbers in different ways
- plotting, ordering, and comparing multi-digit whole numbers
- rounding multi-digit whole numbers
- adding and subtracting multi-digit whole numbers

- factors and multiples
- determining prime and composite numbers
- multiplying multi-digit numbers using strategies and a standard algorithm
- dividing by a one-digit number
- using number patterns
- understanding equations and variables
- understanding perimeter and area relationships
- finding median, mode, and range of whole numbers
- stem-and-leaf plots of whole numbers
- line plots with whole numbers

## Textbook and Materials

No textbooks required. All content is within Canvas.

***Materials***

- printer
- cell phone or scanner
- headset or earbuds
- notebook
- pens
- pencils
- erasers
- scissors
- coloring materials (markers, crayons, colored pencils)
- glue
- tape
- stapler
- ruler
- printer paper
- lined paper
- colored paper
- protractor
- general household objects for activities

## Technical Requirements

- Internet access – preferably high speed (for accessing Canvas)
- browser (we recommend Chrome)
- supported browser plugins and settings
  The following plugins and settings may be required to use our courses.
    - JavaScript enabled

- o   Cookies enabled
- o   Java installed
- Email
- Printing capabilities
- Adobe Reader (download from [Adobe.com](Adobe.com))
- Audio and video capabilities (for watching/listening to course content)
- PDF app (free options available)

## Technical Skill Requirements

Be comfortable with the following:

- accessing online learning materials via Canvas
- Internet search engines and browsers (we recommend Chrome)
- uploading assignments into Canvas (there will be instructions for uploading assignments)

## Course Pacing

This course is designed to be completed in 16 weeks.

- Print this guide and use a calendar to fill in your goal dates for completing each Module.

- To achieve success, students are expected to submit work in each course weekly.

- Students can learn at their own pace; however, "any pace" still means that students must make progress in the course every week.

- Post the pace guide in a place where you and your Parent or Guardian will see it every day (on the refrigerator or next to the computer). Give yourself a check every time you complete a task, and celebrate your efforts!

| Weeks | Lessons | Due Date *(you write this in)* |
|:---:|---|:---:|
| **1** | 01.00 Place Value Understanding: Pretest<br>01.01 Place Value Patterns<br>01.02 Reading and Writing Whole Numbers<br>01.03 Comparing and Ordering Whole Numbers<br>01.04 Rounding Whole Numbers | |
| **2** | 01.05 Adding Multi-Digit Whole Numbers<br>01.06 Subtracting Multi-Digit Whole Numbers<br>01.07 Place Value Understanding: Discussion-Based Assessment<br>01.08 Place Value Understanding: Assessment | |

| Weeks | Lessons | Due Date *(you write this in)* |
|:---:|---|---|
| **3** | 02.00 Multiples and Factors: Pretest<br>02.01 Multiplication Facts with Models<br>02.02 Multiplication Facts with Mental Math<br>02.03 Multiplying by 10s, 100s, and 1,000s | |
| **4** | 02.04 Factor Pairs<br>02.05 Multiples and Factors: Review<br>02.06 Multiples and Factors: Assessment | |
| **5** | 03.00 One-Digit Multiplication: Pretest<br>03.01 Estimates with a One-Digit Factor<br>03.02 Area Models with a One-Digit Factor<br>03.03 Partial Products with a One-Digit Factor | |
| **6** | 03.04 A Standard Algorithm with a One-Digit Factor<br>03.05 One-Digit Multiplication: Discussion-Based Assessment<br>03.06 One-Digit Multiplication: Assessment | |
| **7** | 04.00 Multi-Digit Multiplication: Pretest<br>04.01 Estimates with Multi-Digit Factors<br>04.02 Area Models with Multi-Digit Factors | |
| **8** | 04.03 Partial Products with Multi-Digit Factors<br>04.04 A Standard Algorithm with Multi-Digit Factors<br>04.05 Multi-Digit Multiplication: Review<br>04.06 Multi-Digit Multiplication: Assessment | |
| **9** | 05.00 Dividing by a One-Digit Divisor: Pretest<br>05.01 Getting to Know Division<br>05.02 Estimating Quotients | |
| **10** | 05.03 Dividing with Area Models<br>05.04 Partial Quotients<br>05.05 Long Division | |
| **11** | 05.06 Problem Solving with Division<br>05.07 Dividing by a One-Digit Divisor: Discussion-Based Assessment<br>05.08 Dividing by a One-Digit Divisor: Assessment | |
| **12** | 06.00 Algebraic Thinking: Pretest<br>06.01 Prime or Composite<br>06.02 Number Patterns | |
| **13** | 06.03 Understanding Equations<br>06.04 Writing Equations<br>06.05 Perimeter and Area | |
| **14** | 06.06 Patterns with Perimeter and Area<br>06.07 Algebraic Thinking: Review<br>06.08 Algebraic Thinking: Assessment | |
| **15** | 07.00 Data with Whole Numbers: Pretest<br>07.01 Median, Mode, and Range<br>07.02 Line Plots | |

| Weeks | Lessons | Due Date
(you write this in) |
|:---:|:---|:---|
| **16** | 07.03 Stem-and-Leaf Plots
07.04 Data with Whole Numbers: Discussion-Based Assessment
07.05 Data with Whole Numbers: Assessment | |

## Course Credit

Your grade will be calculated as follows:

- formative assessments (50%)
- summative assessments (50%)

Assignments are labeled as "summative' or "formative" under Grades in Canvas.

## Course Completion and Extensions

- Students may not complete the course in less than 30 days.
- All courses expire six months after the enrollment date.

## Academic Integrity

It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension.

"Scholastic dishonesty" includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

## Artificial Intelligence (AI) Use Policy

This policy covers any generative AI tool, such as ChatGTP, Elicit, Photo Math, etc. This includes text and artwork/graphics/video/audio, etc.

All work submitted in this course must be your own. You may not use artificial intelligence tools to complete your assignments in this course.

If an instructor suspects that an assignment is not the work of the student, it will receive a score of zero. The instructor will message the student or provide feedback on the assignment indicating the need to schedule a one-on-one video conference, during which the student will be required to demonstrate their skills or knowledge through an alternative or mutually agreed-upon assignment. The grade of the alternate or agreed

upon assignment will be determined at the instructor's discretion with the highest possible score being 70%.

If it is determined that a student has violated final exam directions on Final Exam A or CBE Set 1, the exam will be scored as zero. The student may take Final Exam B or CBE Set 2 with the highest possible score being 70%.

The incident will be reported to Texas Tech K-12 Administration and documented in the student's file. Continued violations of Texas Tech University's Academic Integrity Policy will result in the removal of the student from the program.

## Student/Parent Expectations

You will be expected to log into the Canvas course regularly to be aware of possible announcements/reminders and to pace your student's progress in the course.

The following are prohibited while using the Canvas interface:

- spamming;
- hacking; and
- using TTU or Canvas email for commercial purposes;

Inappropriate behavior shall result in consequences ranging from a request to correct the problem, to removal from the course or even the university, depending on the severity of the behavior. Disciplinary actions will be taken according to the TTU K-12 Student Handbook.

## Communication

- You can expect a reply from your instructor within 2 business days.
- Use the Canvas Inbox for sending messages to your instructor.

## Submitting Assignments

You will submit all assignments through Canvas, rather than by mail or email.

## Technical Difficulties

### Getting Help

For student assistance with Canvas, visit [TTU K-12 Support](#).

### Computer Problems

A working computer is necessary for online coursework. Computer problems will not be accepted as a valid reason for failure to complete course activities within the allotted time frame. Identify a second computer, before the course begins, that you can use if you experience computer problems.

### *Server Problems*

When the Canvas server needs to be taken down for maintenance, the Canvas administrator will post an announcement in your course informing you of the time and date. If the server experiences unforeseen problems, your course instructor will notify you.

### *Lost or Corrupted Files*

You must keep/save a copy of every project/assignment on an external disk or personal computer. In the event of any kind of technology failure (e.g., Canvas server crash or virus infection, students' own computer problems, loss of files in cyberspace, etc.) or any disputes, the instructor may request or require you to resubmit the files. In some instances, the instructor may need to open another attempt within Canvas, so communication with your instructor is critical in these circumstances.