

Curriculum Guide for 5th Grade Arithmetic

Unit 1: Whole Numbers and Measures

Curriculum Objectives: A5:1; A5:2; A5:10

9 weeks

Biblical Worldview Essential Questions

When did God first use numbers in the Bible?

Compare the study of math to God's word. How do they both show order in our world?

Objectives	Methods	Resources	Assessment
<p>The students will</p> <ul style="list-style-type: none"> • Write and read numbers up to the one billions • Add and subtract whole numbers • Multiply by a 2-digit factor • Divide by a <u>21</u>-digit factor<u>divisor</u> • Convert English units • Convert metric units • Recall English and metric measures • Recall that God's creation is orderly • Solve story problems with whole numbers and converting measures • Appreciate the structure of math • Recall that God is the Creator of all things. Mathematics is as old as creation itself when God divided the waters under the firmament from the waters above the firmament, and when God divided light from darkness. 	<ul style="list-style-type: none"> • Oral drill • Speed drill • Board work • Examples on board • Scrap paper • Student guided practice • Small group work • Individual practice demonstration • Hands-on activities • Class games • Homework 	<ul style="list-style-type: none"> • Student text (Arithmetic 5) • Teacher text (Arithmetic 5) • Holy Bible • Quizzes, Tests, and Speed Drills (Arithmetic 5) • Arithmetic 3-8 Tables and Facts Charts (Digital Teaching Aid) • Arithmetic 3-8 Charts (Digital Teaching Aid) • Rapid Calculation Drills • Single number cards • Holy Bible • Concept cards • Felt fraction pieces • Flash cards (+, -, x, divide) • Overheads • Colored pencils • Rulers • Arithmetic charts 	<ul style="list-style-type: none"> • Homework • Speed drills • Responses in class • Math games • Quizzes • Tests • Individual assessments

Unit 2: Fractions and Algebraic Equations

Curriculum Objectives: A5:3; A5:4, A5:5, A5:10

9 weeks

Biblical Worldview Essential Questions

How is multiplication used in relation to the First Commission of Genesis 1:26-28?

Objectives	Methods	Resources	Assessment
<p>The students will</p> <ul style="list-style-type: none"> ● Write remainders as fractions ● Determine factor products and common multiples ● <u>Add and subtract fractions</u> ● Reduce fractions ● Recognize proper and improper fractions ● <u>Change between improper fractions and mixed/whole numbers</u> ● Recall divisibility rules ● Cross multiply with canceling ● Identify prime factors ● Calculate time ● Estimate money amounts ● Solve algebraic equations ● Recall that God’s creation is orderly ● Solve story problems with fractions and money ● Appreciate the structure of math ● Demonstrate an understanding of a biblical truth: God’s grace multiplies as we put our faith in Him. 	<ul style="list-style-type: none"> ● Oral drill ● Speed drill board work ● Examples on board ● Scrap paper student guided practice ● Small group work ● Individual practice ● Demonstration ● Hands-on activities ● Class games ● Homework 	<ul style="list-style-type: none"> ● Student text (Arithmetic 5) ● Teacher text (Arithmetic 5) ● Holy Bible ● <u>Quizzes, Tests, and Speed Drills (Arithmetic 5)</u> ● <u>Arithmetic 3-8 Tables and Facts Charts (Digital Teaching Aid)</u> ● <u>Arithmetic 3-8 Charts (Digital Teaching Aid)</u> ● <u>Rapid Calculation Drills</u> ● <u>Single number cards</u> ● Concept cards ● Felt fraction pieces ● Flash cards (+, -, x, division) ● <u>Overheads</u> ● Colored pencils rulers ● Arithmetic charts 	<ul style="list-style-type: none"> ● Homework ● Speed drills ● Responses in class ● Math games ● Quizzes ● Tests <p>individual assessments</p>

Unit 3: Decimal Numbers and Graphs

Curriculum Objectives: A5:7, A5:8, A5:9, A5:10

9 weeks

Biblical Worldview Essential Questions

How does the structure of math help us make sense of the universe?

Objectives	Methods	Resources	Assessment
<p>The students will</p> <ul style="list-style-type: none"> Identify decimal numbers to the 100ths place Compare decimal numbers Add and subtract decimal numbers Change between decimal numbers and fractions Multiply decimal numbers Annex zeros to decimal numbers Estimate decimal numbers Round off money Decipher and construct pictographs, <u>scale drawings</u>, line graphs, and bar graphs <u>Solve temperature problems</u> <u>Implement order of operations</u> Plot ordered pairs Round off whole numbers Recall that God's creation is orderly Solve story problems with decimal numbers interpret a graph to solve a real life problem Appreciate the structure of math 	<ul style="list-style-type: none"> Oral drill Speed drill Board work Examples on board Scrap paper Student guided practice Small group work Individual practice Demonstration Hands-on activities Class games Homework 	<ul style="list-style-type: none"> Student text (Arithmetic 5) Teacher text (Arithmetic 5) Holy Bible <u>Quizzes, Tests, and Speed Drills (Arithmetic 5)</u> <u>Arithmetic 3-8 Tables and Facts Charts (Digital Teaching Aid)</u> <u>Arithmetic 3-8 Charts (Digital Teaching Aid)</u> <u>Rapid Calculation Drills</u> <u>Single number cards</u> Concept cards Felt fraction pieces Flash cards (+, -, x, division) <u>Overheads</u> Colored pencils Rulers Arithmetic charts 	<ul style="list-style-type: none"> Homework Speed drills Responses in class math games Quizzes Tests Individual assessments

Unit 4: Dividing Fractions and Decimal Numbers and Geometry

Curriculum Objectives: A5:5, A5:3, A5:8, A5:10

9 weeks

Biblical Worldview Essential Questions

Measurement: How is God's view of a man measured differently than man's view of himself?

Objectives	Methods	Resources	Assessment
<p>The students will</p> <ul style="list-style-type: none"> ● Divide mixed numbers ● Compare numbers by division ● Find parts of a whole ● Round off mixed numbers ● Multiply and divide by powers of 10 ● Identify basic geometric shapes ● Find the perimeter of squares, rectangles, and triangles ● Find the area of squares and rectangles ● Find squares and square roots ● Recall that God's creation is orderly ● Solve story problems with dividing fractions, finding area or perimeter, and dividing decimals ● Appreciate the structure of math ● Demonstrate an understanding of a biblical truth: God measures a man by looking on the heart. 	<ul style="list-style-type: none"> ● Oral drill ● Speed drill ● Board work ● Examples on board ● Scrap paper ● Student guided practice ● Small group work ● Individual practice ● Demonstration ● Hands-on activities ● Class games ● Homework 	<ul style="list-style-type: none"> ● Student text (Arithmetic 5) ● Teacher text (Arithmetic 5) ● Holy Bible ● Concept cards ● Felt fraction pieces ● Flash cards (+, -, x, division) ● Overheads ● Colored pencils ● Rulers ● Arithmetic charts 	<ul style="list-style-type: none"> ● Homework ● Speed drills ● Responses in class ● Math games ● Quizzes ● Tests ● Individual assessments