

Curriculum Guide for Second Grade Arithmetic

Arithmetic – Unit 1 Pond

6 weeks

A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9

Biblical Worldview Essential Questions

Do you think numbers are important to God?

Arithmetic is orderly. Is orderliness important to God?

What does the Bible say about money?

Objectives	Methods	Resources	Assessment
<p>The student will</p> <ul style="list-style-type: none"> • count to 300 forward and backward by ones, twos, fives, and tens • • identify ordinal number words 1-20 • recall that God’s creation is orderly • count by even and odd numbers • understand ones, tens, and hundreds place value • illustrate place value with counters • order three numbers from least to greatest • write numbers using tally marks • understand the concepts of addition and subtraction • memorize fact families 1-9 • write addition/subtraction sentences • solve 3-addend long combinations • solve 2-digit addition • <u>solve problems</u> • solve addition and subtraction word problems and explain why they are solved as they illustrate story problems • identify operation for story problem using key words • identify circle, square, triangle, rectangle, oval, diamond, hexagon, trapezoid • identify sphere, cone, cylinder, cube, pyramid • identify geometric concepts: side, vertex, edge, face • divide shapes into halves • continue patterns • solve story problems and give the combinations • identify right/left, ordinal positions • identify missing numbers by ones, two, fives, tens • count pennies, dimes, nickels, one-dollar, ten-dollar, and five-dollar bills • order bills and coins from greatest to least 	<ul style="list-style-type: none"> • oral drill • speed drill • board work • scrap paper practice • small group work • individual practice • demonstration • hands-on activities • class games • recitation of facts • visual aids 	<ul style="list-style-type: none"> • A Beka Second Grade Curriculum • student text Arithmetic 2 • teacher text Arithmetic 2 • Holy Bible • Place Value Concept Cards (A Beka) • clock • 1-100 counting chart • yardstick • Teach-a-Coin Set (A Beka) • play money bills • Down By the Pond Game (A Beka) • Left Frog, Right Frog poem (A Beka) • manipulatives for counting • addition flashcards • subtraction flashcards • Drill Set A Flashcards (A Beka) • Combination Dot Cards (A Beka) • calendar • Birthday Graph (A Beka) • 101-200 Counting Chart (A Beka) • straws • rubber bands • large containers • Classroom Thermometer (A Beka) • Mercury Mouse Thermometer (A 	<ul style="list-style-type: none"> • individual assignments • speed drills • oral responses • quizzes • tests

<ul style="list-style-type: none"> • combine coins • complete/read/analyze/compare horizontal and vertical bar graphs • graph tally marks • read/analyze/compare pictographs • read a calendar • put dates on a calendar • memorize the days of the week and the months of the year • understand that God's laws are unchanging • measure lines in inches • tell time to the hour and the half hour • understand A.M. and P.M. • distinguish between analog and digital clocks • read and set a thermometer to even degrees • understand concept of degrees • • understand dozen, half-dozen • understand linear measures inches/feet 		<p>Beka)</p> <ul style="list-style-type: none"> • red construction paper • Days of the Month Bar Graph (A Beka) • various manipulatives to use as needed • dry erase board • dry erase markers • projector 	
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Biblical Worldview Essential Questions

Is God restricted by time or space?

Objectives	Methods	Resources	Assessment
<p>The student will</p> <ul style="list-style-type: none"> • count by threes and twenty-fives, and fifties • understand thousands, ten thousands • solve 4-addend combinatons • solve 3-/4- digit addition with carrying • solve 2-digit subtraction • solve multi-process long combinations • solve multi-step story problems • realize the Bible has the “method” to meet man’s greatest need • count and combine pennies, nickels, dimes, quarters, half-dollars • combine bills and coins • understand that the decimal point separates the dollars from the cents • symmetry • continue patterns • identify missing numbers in counting order • study consecutive months • measure/draw lines in inches and ½ inches • measure/compare lines and give differences • estimate lengths of lines • measure/interpret scale drawings • tell time and set clock to the quarter after/ quarter til hour • determine elapsed time • tell time and set clocks to five minute intervals • realize that God is infinite and not restricted to time or space • read and set a thermometer to odd degrees • understand/memorize temperature reference points (freezing point of water, boiling point of water, normal body temperature) 	<ul style="list-style-type: none"> • oral drill • speed drill • small group work • scrap paper practice • individual practice • demonstration • hands-on activities • class games – recitation of facts 	<ul style="list-style-type: none"> • A Beka Second Grade Curriculum • student text Arithmetic 2 (A Beka arithmetic) • teacher text Arithmetic 2 (A Beka arithmetic) • Holy Bible • chalkboard • chalk • 1-100 Counting Chart (A Beka) • 101-200 Counting Chart (A Beka) • Teach-a-Coin Set (A Beka) • play money bills • Place Value Concept Cards (A Beka) • addition flashcards • subtraction flashcards • clock • thermometer • Combination Dot Cards (A Beka) • calendar • ruler • Big Ruler Chart (A Beka) • Mercury Mouse Thermometer (A Beka) • Drill Set A Flashcards (A Beka) • Straws • yardstick • Various manipulatives to use as needed • Dry erase board • Dry erase markers • Projector 	<ul style="list-style-type: none"> • individual assignments • oral responses • speed drills • quizzes tests

<ul style="list-style-type: none">• find one-half and one fourth of an object, group, or number• compare on half and one fourth• recognize mixed numbers•• understand/memorize linear measures• understand/memorize capacity measures			
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Arithmetic – Unit 3- The Jungle

5 weeks

A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9

Biblical Worldview Essential Questions

What does the Bible say about money?

Why is it important for people to understand how to properly use money?

Objectives	Methods	Resources	Assessment
<p>The student will</p> <ul style="list-style-type: none"> • count/write/read Roman numerals 1-13; 50; 100; 500; 1,000 • solve subtraction with borrowing from thousands • solve subtraction with zeros in minuend • horizontal addition/subtraction with carrying and borrowing • add money • understand concepts and terms of multiplication/division • memorize multiplication tables 0,1,5,10 • memorize division table 10 • write using decimals/cent symbol • perimeter • use digits to write dates • measure lines to determine perimeter • measure/draw lines in centimeters • compare inches/centimeters, yards/meters • determine one-half of number • recognize one-third of an object and a group • understand/memorize English and metric units of weight • compare/estimate units of weight • 	<ul style="list-style-type: none"> • oral drill • speed drill • small group work • board work • scrap paper practice • individual practice • demonstration • hands-on activities • class games • recitation of facts 	<ul style="list-style-type: none"> • A Beka Second Grade Curriculum • student text Arithmetic 2 (A Beka arithmetic) • teacher text Arithmetic 2 (A Beka arithmetic) • Holy Bible • various manipulatives as needed • dry erase board • dry erase markers • projector 	<ul style="list-style-type: none"> • individual assignments • oral responses • speed drills • quizzes • tests

Arithmetic – Unit 4-Camping

5 weeks

A2.1, A2.2, A2.3, A2.4, A2.5, A2.6, A2.7, A2.8, A2.9

Biblical Worldview Essential Questions

Why is it important for people to be able to logically solve problems?

Objectives	Methods	Resources	Assessment
<p>The student will</p> <ul style="list-style-type: none"> • round numbers to the nearest ten • use rounded numbers to estimate sums • round to the nearest dollar • find the dimes' and pennies' place value • understand hundred thousands • check sums using subtraction • add and subtract dollars and cents • relate multiplication facts to division • solve dictated story problems • identify unnecessary information in story problems • identify missing information in story problems • determine least number of bills/coins in an amount • determine change received • make choices using written/visual clues • read/analyze line graphs • plot points on a line graph • use circle graph to compare fractions • memorize multiplication tables 2, 3 • learn division tables 2, 3, 5 • determine one-third of a number • compare fractions 	<ul style="list-style-type: none"> • oral drill • speed drill • small group work • board work • scrap paper practice • individual practice • demonstration • hands-on activities • class games recitation of facts 	<ul style="list-style-type: none"> • student text Arithmetic 2 (A Beka) • teacher text Arithmetic 2 (A Beka) • Holy Bible • chalkboard • chalk • Drill Set A Flashcards (A Beka) • Teach-a-Coin Set (A Beka) • play money bills • clock • Classroom Thermometer (A Beka) • Place Value Concept Cards (A Beka) • ruler • 1-100 Counting Chart (A Beka) • calendar • Mercury Mouse Thermometer (A Beka) • Classroom Calculator Chart (A Beka) • Big Ruler (A Beka) • • various manipulatives as needed • dry erase board • dry erase marker • projector 	<ul style="list-style-type: none"> • individual assignments • oral responses • speed drills • quizzes • tests

using pie graph			
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