CURRICULUM SERIES

Mathematics

Parent Guide / Volume 2

TEACHER RESOURCE / VERIFY, RETEACH, ASSESS

Scripture-centered learning with academically sound instruction, clear student work, and independent practice. An original supplementary course, not a certified full-year standards program.

LEARNING LEVELS Foundations (5-7) | Builders (9-10) | Advancing (around 12)

How to use: read each lesson in order. Copy answers into a notebook or use the writing lines provided. Parent guides should be kept separate from students.

Mathematics Volume 2 | Parent Answers and Teaching Notes

DOWNLOAD OR COPY: Download Mathematics Lessons 11-20: Parent Answers PDF. The complete selectable, copyable text remains below on this page. Open the PDF to save or print it. Keep parent answers separate from student work.

Use with student Lessons 11-20. Check each learner's written work, explanations and units. These are original practice problems; a short module cannot establish complete grade-level or state-test proficiency.

Lesson 11: Place-value operations

" Foundations: 26=2 tens,6 ones; 41=4 tens,1 one; 58=5 tens,8 ones. 8+7=15;13+5=18;18-9=9; estimate 19+20-40.

" Builders: 487+396=883 (estimate about 900);805-478=327;27x14=378; supplies total $63.35.

" Advancing: 4,086x23=93,978;12.45+8.678-3.09=18.038;2,184/12=182.

Lesson 12: Multiplication patterns

" Foundations: 4x3=12; sequences 10,12 and 20,25; 15/5=3.

" Builders: Factors of 24:1,2,3,4,6,8,12,24; first five positive multiples of 6:6,12,18,24,30;36x12=432;51=3x17, composite.

" Advancing: GCF(36,60)=12;LCM(8,12)=24;84=22x3x7;3(4x-5)+2(x+7)=14x-1.

Lesson 13: Unit rates

" Foundations: 3 bags of 2=6;6/2=3;7 is larger than 4.

" Builders: $9/6=$1.50 each;42/3=14 mph;7/9=x/45 - x=35.

" Advancing: 120/2.5=48 mph;180/4=45 mph; (x+1)=25, x=24;division by zero undefined.

Lesson 14: Fractions

" Foundations: 2/4=1/2;two sixths=2/6=1/3.

" Builders: 2/3+1/6=5/6;5/8-1/4=3/8;3/5 of 40=24;7/10 of 90=63;5/6>7/9.

" Advancing: 3/4x8/9=2/3;5/6/2/3=5/4; x=5/4-7/12=2/3;2.5x3/4=1 7/8 cups.

Lesson 15: Coordinates

" Foundations: Accept correct grid, directions and alternating pattern.

" Builders: First-quadrant points must be placed correctly; horizontal distance=5 units; y for x=0,1,2,3:1,3,5,7.

" Advancing: Slope=(11-3)/(5-1)=2; y values for x=-1,0,3:7,5,-1; y intercept=-7.

Lesson 16: Geometry

" Foundations: Look for correct names and measurement comparisons.

" Builders: Rectangle area=84 cm2, perimeter=38 cm;2.5 m=250 cm;triangle area=30 cm2.

" Advancing: Prism volume=216 cm3; circumference-31.4 cm; 7.5cmx4m/cm=30m.

Lesson 17: Statistics

" Foundations: 3 red,2 yellow,4 blue; blue most, yellow fewest.

" Builders: 3,5,5,7,10:mean 6,median 5,mode 5,range 7; sample of five friends not representative.

" Advancing: 1,2,2,3,12: mean 4, median 2; outlier 12 raises mean; probability of even die outcome=1/2; association alone does not prove causation.

Lesson 18: Equations

" Foundations: 2+4=6; missing in ?-3=4 is 7; balanced drawing should match.

" Builders: x=29; x=9; 3a+5 when a=4 is17; 7+3=5+5 means both sides equal10.

" Advancing: 5(x-2)=3x+8 -x=9; (2x+1)/3=5-x=7;2(3x-4)-3(x+6)=3x-26.

Lesson 19: Money and percent

" Foundations: Ten pennies=10 cents; two nickels=10 cents; evaluate needs and wants by explanation.

" Builders: 15% of80=12; discounted price $68; probability blue=3/5; loan requires repayment.

" Advancing: $45x1.08=$48.60; increase 60-75 is25%; ordered coin outcomes HH,HT,TH,TT; P(HH)=1/4.

Lesson 20: Final review

" Foundations: 9+8=17;15-7=8;4x2=8;12/3=4;17<19.

" Builders: 245+389=634;84/7=12;3/4+1/8=7/8;25% of64=16;area54; x=7.

" Advancing: 3(x+4)=2x+19-x=7;5/6-3/8=11/24;18% of250=45;slope=2;data 2,4,6,8,20 mean8 median6.

Mastery and Reteaching

For each objective, record independent, guided, or reteach. Do not reveal keys before independent work. After correction, use different numbers and unfamiliar problems to test transfer. For arithmetic, require shown steps; for applied problems, check units, assumptions and reasonableness. Keep learner records private.

Academy course directory.