# Geometry Standard Lesson Plan Overview Book 1

This Standard Lesson Plan allocates 90 days for each semester.

Test Packet, supplementary material to the *Student Text* and *Teacher’s Edition Teacher’s Toolkit CD,* included in the *Teacher’s Edition*

Student Activities, included on the *Teacher’s Toolkit CD*

\*covered in the *Teacher’s Edition* or *TTK CD*: Student Activities

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| *Chapter 1: Foundations of Geometry* | | | | |
| 1 | Introduction | v–1 |  | * using geometry in architectural feats * building blocks for Christian living  (e.g., Bible study, prayer)\* |
| 2–3 | 1.1 Sets | 2–6 | * Sets in Brief: Elements and Subsets * Sets in Detail: Set Operations * Math History: Georg Cantor * *TTK CD*: Visuals | * the Great Commission (Mark 16:15)\* * recognizing the need to witness to the unsaved (John 4:35)\* |
| 4 | 1.2 Undefined Terms and Definitions | 6–10 | * *TTK CD*: Visuals | * presupposing the Bible is God’s Word  (2 Tim. 3:16)\* * seeing the world as it is meant to be  seen (Heb. 11:3)\* |
| 5 | 1.3 An Ideal Geometry | 10–15 | • Appendix C, The Hiroshima of  Mathematics  • Quiz 1 (1.1–1.2)   * Geometry and Scripture:  God’s Consistency | * describing God’s wonderfully created universe adequately is impossible (Gen. 3:14–19; Job 38; Isa. 55:8–9) * believing the Bible is God’s Word is a Christian cornerstone (Luke 6:47–49; 2 Tim. 3:16) * accepting Christ’s work on the cross is based on God’s Word (Acts 4:12; 1 Cor. 15:3–4) * recognizing the sufficiency of God  (2 Cor. 12:9)\* |
| 6 | Geometry in History—Not Your Usual Math Club | 16–18 |  | * knowing the mind of God through the revelation in the Bible (Job 38–41; Isa. 55:8–9)\* * pattern recognition and human reasoning  are a result of God’s design (Gen. 2:19–20)\* |
| 7 | 1.4 Subsets of Lines and Planes | 18–23 | * *TTK CD*: Visuals | * Jesus created all things (Col. 1:16)\* |
| 8 | Review 1.1–1.4 |  | • Quiz 2 (1.3–1.4)   * Terms and Symbols: Sections 1–4 * Practice: Sections 1–4 * Review: Sections 1–4 |  |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 9 | 1.5 Segment and Angle Measure | 23–29 | * *TTK CD*: Visuals and Resources | * measuring our lives by the absolute  standards in God’s Word (2 Cor. 10:12–18) |
| 10 | Technology Corner— Introduction to The Geometer’s Sketchpad | 30 |  |  |
| 11–12 | 1.6 Two-Dimensional Figures | 31–38 | * Prefixes in Detail * Math History: Jan Brouwer * *TTK CD*: Visuals | * denying the deity of Christ and the Trinity is characteristic of many false religions\* |
| 13 | 1.7 Three-Dimensional Figures | 39–44 | * Appendix D, Flatland   • Quiz 3 (1.5–1.6)   * *TTK CD*: Visuals |  |
| 14 | 1.8 Sketches, Drawings, and Constructions | 45–49 | * Construction Skills * The Geometer’s Sketchpad Investigations * *TTK CD*: Resources | * God’s creation of an orderly universe (Gen. 8:22; Col. 1:16–17; 1 Cor. 14:40) * geometric tools mentioned in Scripture (Isa. 44:13)\* |
| 15 | Chapter 1 Review | 50–51 | • Quiz 4 (1.7–1.8)   * Terms and Symbols:  Sections 5–7 * Practice: Sections 5–8 |  |
| 16 | Activities or Mathardy |  | * Cumulative Review:  Sections 1–7 * *TTK CD*: Resources * Mathardy: Ch. 1 |  |
| 17 | Chapter 1 Test | | | |

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| *Chapter 2: Reasoning and Proof* | | | | |
| 18 | 2.1 Inductive Reasoning | 52–58 | * Appendix E, Sherlock Holmes * Math History: Aristotle * *TTK CD*: Visuals | * understanding and reasoning possible since * God created humans as thinking beings * importance of striving for understanding * (Prov. 4:7) * importance of reasoning (Isa. 1:18; * 1 Pet. 3:15) * proclaiming and accepting the gospel * involves reasoning (Matt. 28:19–20; Acts 24:24–25) * being wary of deceptive reasoning   (1 Cor. 6:9–10; 15:33; Gal. 6:7; 2 Cor. 11:14) |
| 19 | 2.2 Statements and Truth Values | 60–65 |  | * discerning the validity of statements   through the God of truth and His Word (Eph. 5:6; Ps. 31:5; John 17:17) |
| 20 | Geometry Around Us— Designers and Patterns | 59 | • Quiz 1 (2.1–2.2) | * God’s design in creation declares His glory (Job 37:10; 38:29; Luke 12:27; Ps. 19:1) biomimicry * learning from God’s creation (Job 12:7–8;   Prov. 6:6–8)\* |
| 21–22 | 2.3 Conditionals and Biconditionals | 65–71 | * Practicing Truth Tables * Switching Circuits |  |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 23 | 2.4 Deductive Reasoning | 71–77 | * Appendix F, Through the Looking Glass * Appendix G, God and Logic * *TTK CD*: Resources | * sinful man must die (Rom. 3:23; 6:23; Rev. 21:8) * believing on Jesus brings salvation  (Rom. 10:9–13) * the importance of logic from a Christian  perspective\* * Christ’s resurrection guarantees ours  (1 Cor. 15:13–20) * encouraging sound doctrine  (2 Tim. 4:1–5; Titus 1:9–11) |
| 24 | Review 2.1–2.4 |  | • Quiz 2 (2.3–2.4)   * Geometry and Scripture:  Statements * Fallacies in Advertising | * understanding logic statements to discern  truth and to avoid deception\* |
| 25 | 2.5 Algebraic Reasoning | 78–83 | * Sports Teams as an Equivalence  Relation * Truth Tables in Detail * *TTK CD*: Visuals | * our labor in the work of the Lord is not in vain (1 Cor. 15:58) * God’s Word guides us (Prov. 6:23;  Ps. 119:105)\* |
| 26 | 2.6 Proofs Using Segments | 83–87 | * Pasch’s Postulate * *TTK CD*: Visuals | * working diligently at tasks set before us  (Gen. 2:15; Eph. 4:28; Col. 3:23;  2 Thess. 3:10–13) |
| 27 | Technology Corner— Angle Conjectures | 88 | • Quiz 3 (2.5–2.6) |  |
| 28–29 | 2.7 Proofs Using Angles | 89–96 | * *TTK CD*: Visuals |  |
| 30 | 2.8 Bisectors | 97–102 | * The Geometer’s Sketchpad  Investigations * Construction Skills * *TTK CD*: Visuals and Resources |  |
| 31 | Chapter 2 Review | 103–5 | • Quiz 4 (2.7–2.8) |  |
| 32 | Activities or Mathardy |  | * Terms, Symbols, and Proofs * Cumulative Review * Mathardy: Ch. 2 |  |
| 33 | Chapter 2 Test | | | |

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| *Chapter 3: Parallel and Perpendicular Lines* | | | | |
| 34 | 3.1 Parallel Lines and Transversals | 106–13 | * Parallel Lines * *TTK CD*: Visuals and Resources | * designing unique buildings geometrically |
| 35 | 3.2 Proving Lines Parallel | 114–19 | * Practicing with Transversals * *TTK CD*: Visuals |  |
| 36 | 3.3 Constructing Parallel and Perpendicular Lines | 120–25 | * Appendix H, Learning Math  and Learning Truth: Back to Jerusalem and Athens   • Quiz 1 (3.1–3.2)   * Construction Skills * Architecture in Brief * *TTK CD*: Resources | * viewing mathematics and truth from a biblical perspective\* |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 37 | Geometry in History—A Revolutionary Museum | 126–28 | • Quiz 2 (3.3) | * God’s Word reveals erroneous thinking  (Gal. 1:8)\* * recognizing the true source of knowledge (Prov. 1:7; John 17:17) * affirming the existence of God (Rom. 1:20;  1 Cor. 8:6; Col. 2:3; Rev. 4:11)\* |
| 38 | 3.4 Distances, Midpoints, and Slopes | 129–35 | * Geometry and Scripture:   Distance   * *TTK CD*: Visuals | * ensuring safety (Deut. 22:8)\* * understanding measurements in Scripture\* |
| 39 | Technology Corner— Midpoints and Slopes | 136 |  |  |
| 40–41 | 3.5 Equations of Lines | 137–42 | * The Geometer’s Sketchpad  Investigations * Math History: Johann Heinrich  Lambert |  |
| 42 | Chapter 3 Review | 143–45 | • Quiz 3 (3.4–3.5) |  |
| 43 | Activities or Mathardy |  | * Cumulative Review * Mathardy: Ch. 3 |  |
| 44 | Chapter 3 Test | | | |
| 45 | Review Chapters 1–3 | | | |
| 46 | First Quarter Exam (Chapters 1–3) | | | |

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| *Chapter 4: Congruent Triangles* | | | | |
| 47 | 4.1 Angles in Triangles | 146–55 | * The Geometer’s Sketchpad  Investigations * *TTK CD*: Visuals and Resources | * avoiding deception by relying on the Bible  (Gal. 1:8–9; 1 John 4:1; Acts 17:11) * loving God leads to loving others  (Luke 10:27)\* * setting our affections on things above  (Col. 3:2; Matt. 6:33)\* |
| 48 | 4.2 Congruent Figures | 156–62 | * Design in Detail * *TTK CD*: Visuals |  |
| 49 | 4.3 Congruence Postulates | 163–68 | • Quiz 1 (4.1–4.2)   * *TTK CD*: Visuals |  |
| 50 | 4.4 Applying Congruence Postulates | 169–75 | * *TTK CD*: Visuals | * striving to achieve (Phil. 3:13–17) * serving God enthusiastically brings His  reward (Col. 3:23–24) |
| 51 | Review 4.1–4.4 |  |  |  |
| 52 | Technology Corner— Exploring AAA and SSA | 176 | • Quiz 2 (4.3–4.4) |  |
| 53 | 4.5 Conditions for Congruent Triangles | 177–85 | * Math History: Euclid * *TTK CD*: Visuals |  |
| 54 | 4.6 Right Triangle Congruence | 185–91 | * Construction Skills * Terms and Symbols * *TTK CD*: Visuals |  |
| 55 | Review 4.5–4.6 |  |  |  |
| 56 | Geometry Around Us— Architects and Buildings | 192 | • Quiz 3 (4.5–4.6)   * Geometry and Scripture:  Architecture | * following plans in construction  (1 Chron. 28:11–12; 1 Kings 6) * recognizing God’s involvement in the  architecture of the ark, the tabernacle,  and the New Jerusalem\* |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 57 | 4.7 Coordinate Geometry of Triangles | 193–200 | * *TTK CD*: Visuals |  |
| 58 | Chapter 4 Review | 201–3 | • Quiz 4 (4.7) |  |
| 59 | Activities or Mathardy |  | * Cumulative Review * Mathardy: Ch. 4 |  |
| 60 | Chapter 4 Test | | | |
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| *Chapter 5: Relationships in Triangles* | | | | |
| 61–62 | 5.1 Circumcenter and Orthocenter | 204–13 | * Appendix I, Concurrency Proofs * Conjectures * *TTK CD*: Visuals | * providing geometric beauty in design with triangles * symbolizing the Trinity with an equilateral  triangle (Matt. 28:19; John 10:30) * Christians encouraged to be like-minded  (Phil. 2:2)\* |
| 63 | 5.2 Incenter and Centroid | 214–20 | * Appendix I, Concurrency Proofs * The Geometer’s Sketchpad  Investigations * *TTK CD*: Visuals and Resources |  |
| 64 | Technology Corner— Triangle Relationships | 221 | • Quiz 1 (5.1–5.2) |  |
| 65 | 5.3 Inequalities | 221–27 | * Math History: Jean-Victor  Poncelet * *TTK CD*: Visuals | * illustrating inequality properties (Gen. 5; 41; Exod. 30; Matt. 25:14–30) |
| 66–67 | 5.4 Indirect Proofs | 227–32 | * Indirect Proofs in Detail * Detectives | * illustrating indirect reasoning (2 Kings 7:3–5; * 1 Cor. 15:12–20; Matt. 7:24–27) |
| 68 | Geometry Around Us— Carpentry | 233 | • Quiz 2 (5.3–5.4) | * identifying opportunities for good works (James 2:14–16; Matt. 5:16; 2 Tim. 3:17)\* * fulfilling the Great Commission (Matt. 28:19–20)\* |
| 69 | 5.5 More Inequalities | 234–42 | * *TTK CD*: Visuals and Resources |  |
| 70 | Chapter 5 Review | 243–45 | • Quiz 3 (5.4–5.5) |  |
| 71 | Activities or Mathardy |  | * Terms and Proofs * Cumulative Review * Mathardy: Ch. 5 |  |
| 72 | Chapter 5 Test | | | |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| *Chapter 6: Quadrilaterals* | | | | |
| 73 | 6.1 Classifying Quadrilaterals | 246–54 | * *TTK CD*: Visuals and Resources | * using geometric relationships in helping others |
| 74 | Technology Corner— Exploring Quadrilaterals | 255 |  |  |
| 75 | 6.2 Characteristics of Parallelograms | 256–63 | * Math History: Quadrilaterals * Geometry and Scripture:  Dimensions * *TTK CD*: Visuals | * exploring the dimensions of our universe and understanding that God is not limited by scientific laws\* |
| 76–77 | 6.3 Proofs of Parallelograms | 263–69 | • Quiz 1 (6.1–6.2)   * *TTK CD*: Visuals and Resources |  |
| 78 | 6.4 Rectangles, Rhombi, and Squares | 270–76 | * Construction Skills * *TTK CD*: Visuals |  |
| 79 | Review 6.1–6.4 |  | • Quiz 2 (6.3–6.4) |  |
| 80 | 6.5 Trapezoids and Kites | 277–85 | * Parallelogram Proofs * Cyclic Quadrilaterals * The Geometer’s Sketchpad  Investigations * *TTK CD*: Visuals and Resources |  |
| 81 | Geometry Around Us— Sports | 286 |  | * presenting our bodies prepared for every good work (1 Cor. 6:19–20; Rom. 12:1;  2 Tim. 2:21) * competing correctly with grace  (2 Tim. 2:5; Matt. 7:12; Phil. 2:3–4) * learning self-discipline (Eccles. 7:9;  Titus 2:12) * bringing honor to Christ instead of self (Matt. 20:25–28; Prov. 25:27; 1 Cor. 10:31; 2 Cor. 10:17; Jer. 9:23–24) |
| 82–83 | 6.6 Coordinate Geometry of Quadrilaterals | 287–92 | * Terms and Proofs |  |
| 84 | Chapter 6 Review | 293–95 | • Quiz 3 (6.5–6.6) |  |
| 85 | Activities or Mathardy |  | * Cumulative Review * Mathardy: Ch. 6 |  |
| 86 | Chapter 6 Test | | | |
| 87–89 | Review for Second Quarter Exam (Chapters 4–6) or First Semester Exam (Chapters 1–6) | | | |
| 90 | Second Quarter Exam or First Semester Exam | | | |

# Geometry Standard Lesson Plan Overview Book 2

This Standard Lesson Plan allocates 90 days for each semester.

Test Packet, supplementary material to the *Student Text* and *Teacher’s Edition Teacher’s Toolkit CD,* included in the *Teacher’s Edition*

Student Activities, included on the *Teacher’s Toolkit CD*

\*covered in the *Teacher’s Edition* or *TTK CD*: Student Activities

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| *Chapter 7: Area* | | | | |
| 91 | 7.1 Areas of Rectangles, Parallelograms, and Triangles | 296–304 | • Geometry and Scripture: Area  • Perimeter and Area  • The Geometer’s Sketchpad  Investigations   * *TTK CD*: Visuals | * God formed the earth for man to have dominion (Isa. 45:18; Gen. 1:28)\* * considering the needs of others as farmers improve agricultural techniques (Lev. 19:9– 10; Deut. 24:19–22; Ruth 2:2–3; Matt. 12:1) * preaching the gospel to all lands (Rom. 15:20–24) * realizing the importance of evangelism  (1 Cor. 9:16)\* * understanding area in Scripture\* |
| 92 | Technology Corner— Center of Gravity | 305 |  |  |
| 93 | 7.2 Areas of Other Quadrilaterals | 306–11 | • *TTK CD*: Visuals |  |
| 94 | 7.3 The Pythagorean Theorem | 312–17 | • Quiz 1 (7.1–7.2)  • Math History: Heron of Alexandria   * *TTK CD*: Visuals | * God’s creation of man’s intellectual  ability versus the evolutionary view of the undeveloped intelligence of the caveman\* |
| 95–96 | 7.4 Special Right Triangles | 318–24 | • Skills Review: Sections 1–4   * *TTK CD*: Visuals |  |
| 97 | Geometry in History— Another Purpose | 325–26 | • Quiz 2 (7.3–7.4) | * impact of worldview on vocations  (Deut. 18:10–14)\* * consulting worldly wisdom is fruitless  (Dan. 4:6–7)\* |
| 98 | 7.5 Areas of Regular Polygons | 327–32 | • Drawing Octagons  • *TTK CD*: Visuals |  |
| 99–100 | 7.6 Circles, Sectors, and Segments | 333–38 | • Skills Review: Sections 5–6  • Geometric Probability  • Terms, Symbols, and Proofs  • *TTK CD*: Visuals |  |
| 101 | Chapter 7 Review | 339–41 | • Quiz 3 (7.5–7.6) |  |
| 102 | Activities or Mathardy |  | • Cumulative Review  • Mathardy: Ch. 7 |  |
| 103 | Chapter 7 Test | | | |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| *Chapter 8: Circles* | | | | |
| 104 | 8.1 Circles and Chords | 342–50 | * The Geometer’s Sketchpad Investigations * *TTK CD*: Visuals | * ability to communicate brings responsibility to edify others  (James 3:1–12) * unity of the Trinity (Matt. 28:19; 1 Tim. 2:5) |
| 105–6 | 8.2 Tangents | 351–58 | * The Geometer’s Sketchpad Investigations * Locus Problem Principles * *TTK CD*: Visuals |  |
| 107 | Technology Corner— Constructing Common Tangents | 359 |  |  |
| 108–9 | 8.3 Arc Measure and Length | 360–68 | • Quiz 1 (8.1–8.2)   * Math History: Archimedes * *TTK CD*: Visuals |  |
| 110 | Geometry Around Us— Transportation | 369 |  | * fearing and believing the Lord (Exod. 14:25–31) * preparing to do God’s will (Eph. 5:17) * using geometry to exercise dominion over * the earth and meet people’s needs (Gen. 1:28; Gal. 6:2)\* * biomimicry (Col. 1:16)\* |
| 111 | 8.4 Inscribed Angles | 370–75 | * Geometry and Scripture: Pi * *TTK CD*: Visuals | * exploring the value of pi as described in  1 Kings 7:23–26\* |
| 112 | Review 8.1–8.4 |  | • Quiz 2 (8.3–8.4) |  |
| 113 | 8.5 Angles and Circles | 376–81 | * *TTK CD*: Visuals |  |
| 114–15 | 8.6 Circular Constructions | 382–86 | • Quiz 3 (8.5)   * Construction Skills * Cyclic Quadrilaterals Revisited * *TTK CD*: Visuals and Resources |  |
| 116 | 8.7 Coordinate Geometry of Circles | 387–92 | * Skills Review |  |
| 117 | Chapter 8 Review | 393–95 | • Quiz 4 (8.6–8.7)   * Terms and Symbols |  |
| 118 | Activities or Mathardy |  | * Cumulative Review * Mathardy: Ch. 8 |  |
| 119 | Chapter 8 Test | | | |

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| *Chapter 9: Surface Area and Volume* | | | | |
| 120 | 9.1 Analyzing Three- Dimensional Figures | 396–404 | * *TTK CD*: Visuals and Resources | * applying scripturally derived principles to mathematical methods (2 Tim. 3:16–17)\* * true wisdom begins with the fear of the Lord (Prov. 9:10) |
| 121 | Technology Corner— Platonic Solids | 405 | * Math History: Plato * Platonic Solids |  |
| 122 | 9.2 Surface Areas of Prisms and Cylinders | 406–12 | * *TTK CD*: Visuals |  |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 123 | 9.3 Surface Areas of Pyramids and Cones | 412–21 | • Quiz 1 (9.1–9.2)   * *TTK CD*: Visuals |  |
| 124 | 9.4 Volumes of Prisms and Cylinders | 421–28 | * Geometry and Scripture: Volume * *TTK CD*: Visuals | * using just balances and measures  (Ezek. 45:10)\* * understanding units of volume in Scripture\* |
| 125 | Review 9.1–9.4 Geometry Around Us—Engineering | 435 |  | * developing a solid biblical worldview  as a means to making wise choices and honoring God in all we do |
| 126 | 9.5 Volumes of Pyramids and Cones | 428–34 | • Quiz 2 (9.3–9.4)   * *TTK CD*: Visuals and Resources |  |
| 127 | 9.6 Surface Areas and Volumes of Spheres | 436–41 | * Skills Review: Surface Area and Volume |  |
| 128 | Review 9.5–9.6 |  | • Quiz 3 (9.5–9.6) |  |
| 129 | 9.7 Geometry of Spheres | 441–46 | * Appendix M, Implications and Insights * Math History: Georg Friedrich Bernhard Riemann * Hyperbolic Geometry * *TTK CD*: Visuals * Any world atlas or globe | * faith is not in the wisdom of men (1 Cor. 2:5) * God’s infallible Word provides a sure foundation (2 Tim. 3:16) |
| 130 | 9.8 Drawing Three- Dimensional Figures | 446–52 | * Math History: Gaspard Monge * The Geometer’s Sketchpad Investigations   *TTK CD*: Visuals and Resources |  |
| 131 | Chapter 9 Review | 453–55 | • Quiz 4 (9.7–9.8)   * Terms and Practice |  |
| 132 | Activities or Mathardy |  | * Cumulative Review   Mathardy: Ch. 9 |  |
| 133 | Chapter 9 Test | | | |
| 134 | Review Chapters 7–9 | | | |
| 135 | Third Quarter Exam (Chapters 7–9) | | | |

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| *Chapter 10: Transformations and Symmetry* | | | | |
| 136 | 10.1 Reflections | 456–65 | * Transformations in Brief * The Geometer’s Sketchpad Investigations * *TTK CD*: Visuals and Resources | * the earth and its living creatures testify that God created it all (Job 12:7–10) * biomimicry |
| 137 | 10.2 Translations | 465–72 | * Geometry and Scripture: Transformations * *TTK CD*: Visuals and Resources | * exploring translations found in Scripture\* |
| 138–39 | 10.3 Rotations | 473–80 | • Quiz 1 (10.1–10.2)   * *TTK CD:* Visuals and Resources |  |
| 140 | 10.4 Isometries | 481–88 | * Rigid Motion and Isometries * *TTK CD*: Visuals and Resources |  |
| 141 | Review 10.3–10.4 |  | • Quiz 2 (10.3–10.4) |  |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 142 | Geometry in History— Computer Graphics | 489–91 | * The Geometer’s Sketchpad Investigations | * analyzing and responding to an expressed * worldview * the universe was created and is sustained  by God (Gen. 1:1–2; Jer. 32:17; Rom. 11:36;  Col. 1:16–17; Job 33:4; 1 Cor. 8:6)\* |
| 143 | 10.5 Symmetry | 492–98 | * *TTK CD*: Visuals | * praising God for His wonderful works of  creation (Ps. 139:14) * humans without excuse before God  (Rom. 1:20) |
| 144 | 10.6 Dilations | 498–504 | * Math History: Felix Klein * Möbius Strip and Klein Bottle * Topological Transformations * *TTK CD*: Visuals and Resources |  |
| 145 | Review 10.5–10.6 |  | • Quiz 3 (10.5–10.6) |  |
| 146 | 10.7 Tessellations | 505–9 | * *TTK CD*: Visuals and Resources |  |
| 147 | Technology Corner— Drawing Tessellations | 510 |  |  |
| 148 | Chapter 10 Review | 511–15 | • Quiz 4 (10.7)   * Terms, Symbols, and Practice * *TTK CD*: Resources | * worldview analysis essay exercise |
| 149 | Activities or Mathardy |  | * Cumulative Review * Mathardy: Ch. 10 |  |
| 150 | Chapter 10 Test | | | |

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| *Chapter 11: Similarity* | | | | |
| 151 | 11.1 Similar Figures | 516–24 | * Math History: David Hilbert * *TTK CD*: Visuals | * praising God for His wonderful works of creation (Ps. 139:14) * discussion of the scale model of Jerusalem\* |
| 152 | 11.2 Proving Similar Triangles | 524–32 | * Appendix N, Postulate Summary * The Geometer’s Sketchpad   Investigations   * *TTK CD*: Visuals and Resources |  |
| 153 | 11.3 Similarity Within Right Triangles | 532–38 | • Quiz 1 (11.1–11.2)   * The Geometer’s Sketchpad Investigations * *TTK CD*: Visuals and Resources |  |
| 154 | Technology Corner— Investigating Parallel Partitions | 539 |  |  |
| 155 | 11.4 Proportional Partitions | 540–48 | * *TTK CD*: Visuals |  |
| 156 | Review 11.1–11.4 |  | • Quiz 2 (11.3–11.4) |  |
| 157 | 11.5 Lengths, Areas, and Volumes of Similar Figures | 549–54 | * The Geometer’s Sketchpad Investigations * *TTK CD*: Visuals and Resources |  |
| 158 | 11.6 Circles and Proportions | 555–62 | * *TTK CD*: Visuals and Resources |  |

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| **Day** | **Topic** | **Pages** | **Support Materials** | **Bible Integration** |
| 159 | Geometry Around Us—Art | 563 | * Appendix O, Leonardo da Vinci   • Quiz 3 (11.5–11.6)   * Geometry and Scripture: Images | * recognizing proportions in creation * using artistic talents in ministry * understanding God’s view of artistic * images\* * understanding that we are created in God’s image\* |
| 160 | 11.7 The Golden Ratio | 564–70 | * Appendix P, Spirals * The Geometer’s Sketchpad   Investigations   * *TTK CD*: Visuals | * communicating accurately and honestly so personal testimony and integrity are not harmed (2 Cor. 8:21)\* * intriguing examples of golden spirals in nature from a biblical worldview\* |
| 161 | Chapter 11 Review | 571–73 | • Quiz 4 (11.7)   * Skills Review | * preparing to serve God wherever He may lead\* |
| 162 | Activities or Mathardy |  | * Cumulative Review * Mathardy: Ch. 11 |  |
| 163 | Chapter 11 Test | | | |
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| *Chapter 12: Trigonometry* | | | | |
| 164 | 12.1 Trigonometric Ratios | 574–81 | * Math History: The Development of Trigonometry * The Geometer’s Sketchpad  Investigations * *TTK CD*: Visuals and Resources | * using geometry in surveying, space * exploration, navigation, and engineering to provide for needs of life on earth (Deut. 19:14; 27:17) |
| 165 | 12.2 Solving Right Triangles | 582–88 | * *TTK CD*: Visuals and Resources |  |
| 166 | Geometry Around Us— Space Exploration | 589 | • Quiz 1 (12.1–12.2) | * discussion and worldview analysis relating  to quotes from astronauts |
| 167 | 12.3 Area | 590–95 | * Skills Review: Sections 1–3 * *TTK CD*: Visuals |  |
| 168 | 12.4 Vectors | 596–601 | * *TTK CD*: Visuals |  |
| 169 | Review 12.3–12.4 |  | • Quiz 2 (12.3–12.4) |  |
| 170 | Technology Corner— Discovering Trigonometric Identities | 602 |  |  |
| 171 | 12.5 Trigonometric Identities | 603–7 | * Golden Rectangle: Proof Construction | * Jesus is one with God (John 5:18; 10:30)\* |
| 172 | 12.6 Law of Cosines and Law of Sines | 608–13 | * Skills Review: Section 6 * *TTK CD*: Visuals | * using trigonometry to better fulfill the Creation Mandate (Gen. 1:28)\* |
| 173 | Review 12.5–12.6 |  | • Quiz 3 (12.5–12.6)   * Terms and Practice |  |
| 174 | Chapter 12 Review | 614–16 | * Cumulative Review |  |
| 175 | Activities or Mathardy |  | * Mathardy: Ch. 12 |  |
| 176 | Chapter 12 Test | | | |
| 177–79 | Review for Fourth Quarter Exam (Chapters 10–12) or Second Semester Exam (Chapters 7–12) | | | |
| 180 | Fourth Quarter Exam or Second Semester Exam | | | |