

Table of Contents

About the Series Editor	ix
About the Authors	xi
Introduction	1
The Grain Size of Change Is the Teacher Team	1
Knowing Your Vision for Mathematics Instruction and Assessment	2
A Cycle for Analysis and Learning: The Instructional Unit	3
Before the Unit	5
During the Unit	5
After the Unit	5
CHAPTER 1	
Before the Unit	7
HLTA 1: Making Sense of the Agreed-On Essential Learning Standards (Content and Practices) and Pacing	9
The What	9
The How	11
Your Team's Progress	20
HLTA 2: Identifying Higher-Level-Cognitive-Demand Mathematical Tasks	22
The What	22
The How	24
Your Team's Progress	34
HLTA 3: Developing Common Assessment Instruments	36
The What	36
The How	37
Your Team's Progress	52
HLTA 4: Developing Scoring Rubrics and Proficiency Expectations for the Common Assessment Instruments	54
The What	54
The How	55
Your Team's Progress	65
HLTA 5: Planning and Using Common Homework Assignments	67
The What	67
The How	69
Your Team's Progress	74
Setting Your Before-the-Unit Priorities for Team Action	76

CHAPTER 2

During the Unit	79
HLTA 6: Using Higher-Level-Cognitive-Demand Mathematical Tasks Effectively	83
The What	83
The How	84
Your Team's Progress	97
HLTA 7: Using In-Class Formative Assessment Processes Effectively	99
The What	100
The How	101
Your Team's Progress	121
HLTA 8: Using a Lesson-Design Process for Lesson Planning and Collective Team Inquiry	123
The What	123
The How	127
Your Team's Progress	138
Setting Your During-the-Unit Priorities for Team Action	139

CHAPTER 3

After the Unit	141
HLTA 9: Ensuring Evidence-Based Student Goal Setting and Action for the Next Unit of Study	143
The What	144
The How	144
Your Team's Progress	158
HLTA 10: Ensuring Evidence-Based Adult Goal Setting and Action for the Next Unit of Study	159
The What	159
The How	160
Your Team's Progress	168
Setting Your After-the-Unit Priorities for Team Action	170

EPILOGUE

Taking Your Next Steps	173
-------------------------------	------------

APPENDIX A

Standards for Mathematical Practice	177
Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content	179

APPENDIX B

Standards for Mathematical Practice Evidence Tool	181
Mathematical Practice 1: "Make Sense of Problems and Persevere in Solving Them"	181
Mathematical Practice 2: "Reason Abstractly and Quantitatively"	181

Mathematical Practice 3: “Construct Viable Arguments and Critique the Reasoning of Others”	182
Mathematical Practice 4: “Model With Mathematics”	182
Mathematical Practice 5: “Use Appropriate Tools Strategically”	182
Mathematical Practice 6: “Attend to Precision”	183
Mathematical Practice 7: “Look for and Make Use of Structure”	183
Mathematical Practice 8: “Look for and Express Regularity in Repeated Reasoning”	184
APPENDIX C	
Cognitive-Demand-Level Task-Analysis Guide	185
APPENDIX D	
Sources for Higher-Level-Cognitive-Demand Tasks	187
APPENDIX E	
How the Mathematics at Work High-Leverage Team Actions Support the NCTM <i>Principles to Actions: Ensuring Mathematical Success for All</i>	189
References and Resources	193
Index	199

Visit go.solution-tree.com/mathematicsatwork to download
the reproducibles in this book.