McGraw-Hill
Illustrative Mathematics®

The highest-rated curriculum. A partner you know and trust.
Our catalog is informed by the Concerns-Based Adoption Model, and so we have grouped our offerings roughly around stages of concern that teachers may experience in implementing a new curriculum. Every offering focuses on the knowledge and skills teachers need to teach IM effectively, but they are further grouped into:

**Foundation | Teach & Learn**  
Designed for schools in their first implementation year, offerings that support teachers to understand the mathematical progressions in the curriculum, the instructional routines, and other embedded supports for understanding and managing teaching with IM.

**Extension | Teach & Respond**  
Designed for schools with experience teaching IM, offerings that support teachers to anticipate, make sense of, and respond to student thinking using tools in the IM curriculum—such as understanding trajectories across grade-levels to support students with unfinished learning, how to adapt instruction based on formative assessment, etc.

**Teach & Lead**  
Designed for schools with experience teaching IM that are ready to teach and lead collaboratively, offerings that focus on building local capacity through teacher collaboration routines and tools for planning, looking at student work, and reflecting on practice.

For the most current McGraw-Hill *Illustrative Mathematics* professional learning offerings, please contact your local McGraw-Hill Sales Representative or visit [illustrativemathematics.org](http://illustrativemathematics.org)
IM coaching is available to support IM implementation. Coaching focuses on new teaching practices that support student learning.
Attendees:
Teachers and Coaches

Name:
Teaching and Learning with IM 6–8 Math Curriculum

Agenda:
Day One:
- Problem-based Lesson Structure
- Assessment
- Math Content Routines

Day Two:
- 5 Practices
- Math Language Routines
- Teaching Unit 1
- Classroom Norms

Description:
During this two-day implementation onsite event, teachers and coaches will be guided by an IM Certified facilitator to gain first-hand experience and fluency with the IM curricula.

Attendees Will Understand:
- The structure of an IM lesson—invitation, deep dive, consolidation/application, and its learning goals.
- The available assessment resources and their purposes.
- Instructional routines and their value in the IM curriculum.
- The 5 Practices for Orchestrating Mathematical Discussion and how the IM curriculum uses them to support teachers in their planning and to support student discourse.
- How Math Language Routines in the IM curriculum support English learners and students with disabilities.
- How to organize and plan for Lesson 1.
- Techniques for setting classroom norms that support problem-based learning.

Duration/Format:
12 hours, onsite

Prerequisites:
None
### Attendees: Coaches

**Name:** Supporting Teaching and Learning with IM 6–8 Math Curriculum

**Description:**
- Curriculum-centered PLC modules.
- Supporting teachers in Unit 1. (Using pre-assessments and cool-downs to plan instruction.)
- Facilitating days one and two.

**Prerequisites:** Teaching and Learning with IM 6–8 Math Curriculum

**Duration/Format:**
- Six hours, onsite

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### Attendees: Teachers

**Name:** Unit Overviews Per Grade Level

**Description:**
- Take a deep dive into two lessons.
- Use cool-downs to understand the coherence of the unit.
- Collaboratively plan using the curriculum resources and unit assessments.

Unit overviews support teachers to make effective instructional decisions such as engaging students, effective questioning, pacing, formative assessment, and differentiation, through making visible the big ideas and coherence within a unit, and how understanding the trajectory of learning goals across lesson supports effective planning.

**Prerequisites:** Teaching and Learning with IM 6–8 Math Curriculum

**Duration/Format:**
- Two hours each (24 total, eight per grade level), onsite or virtual

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### Attendees: Coaches

**Name:** Unit Overviews for Coaches

**Description:**
- Work with the IM facilitator to review the highlights of the three grade-level overviews for the unit and the key ideas to bring out when facilitating overviews with teachers.
- This is especially valuable for districts who will not be sending their teachers through the IM Certified Unit Overviews and will be leading their teachers on their own.

**Prerequisites:** Teaching and Learning with IM 6–8 Math Curriculum

**Duration/Format:**
- Two hours per session (covering all three grade levels), onsite or virtual
Select two of these three-hour modules for a full six-hour day of professional learning.

<table>
<thead>
<tr>
<th>Attendees:</th>
<th>Duration/Format:</th>
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<tbody>
<tr>
<td>Teachers</td>
<td>Three hours, onsite</td>
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<thead>
<tr>
<th>Name:</th>
<th>Prerequisites:</th>
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<tbody>
<tr>
<td>5 Practices: Looking at a Case Study</td>
<td>None</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
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<tr>
<td>Gain an understanding of the 5 Practices for Orchestrating Mathematical Discussions, and how the curriculum embeds this planning structure in the lessons.</td>
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<tr>
<th>Name:</th>
<th>Prerequisites:</th>
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<tbody>
<tr>
<td>Instructional Routines</td>
<td>None</td>
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<tr>
<td><strong>Description:</strong></td>
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<tr>
<td>Explore the three important mathematical routines used in the IM curriculum: Notice and Wonder, Number Talk, and Which One Doesn't Belong. Plus, gain effective guidance on how these routines are used in IM.</td>
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<th>Name:</th>
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<tbody>
<tr>
<td>Math Language Routines 1</td>
<td>None</td>
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<tr>
<td><strong>Description:</strong></td>
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<tr>
<td>Explore four Mathematical Language Routines (MLRs) that support the learning of mathematics and English language development:</td>
<td></td>
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<tr>
<td>• Stronger and Clearer Each Time</td>
<td>• Co-craft Questions and Problems</td>
</tr>
<tr>
<td>• Collect and Display</td>
<td>• Three Reads</td>
</tr>
<tr>
<td>Attendees:</td>
<td>Duration/Format:</td>
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<tr>
<td>Teachers</td>
<td>Three hours, onsite</td>
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</table>

**Math Language Routines 2**

**Description:**
Explore four more Math Language Routines (MLRs) that support the learning of mathematics and English language development:
- Compare and Connect
- Discussion Supports
- Critique, Correct, Clarify
- Info Gap

**Attendees:**
Teachers

**Name:**
**Facilitated Unit and Lesson Planning**

**Description:**
Collaborate with the IM facilitator on an effective unit and planning structure that focuses the learning across the unit.

**Attendees:**
District Administrators

**Curriculum Overview**

**Description:**
Survey the IM curriculum with a focus on the philosophy and instructional shifts and the resources available in the curriculum for supporting teachers around student understanding and discourse, planning, assessment, and instructional routines.

**Attendees:**
District Administrators

**Observing a Problem-Based Classroom**

**Description:**
Examine the philosophy of a problem-based classroom and learn how to effectively observe teachers’ instruction of the IM curriculum.

**Attendees:**
District Administrators

**Prerequisites:**
Ideally, (administrators’) Curriculum Overview, but not required.
## Attendees:
Teachers

## Name:
**Teaching and Responding with IM 6–8 Math Curriculum**

## Description:
This advanced two-day onsite event brings teachers and coaches together with an IM Certified facilitator for a series of units where they’ll gain first-hand experience and fluency with the IM curriculum.

## Goals:
- Take a level two deep dive into the 5 Practices with scenario discussions.
- Discover the value of cool-downs as a tool for identifying opportunities for improvement in instructional planning.
- Learn how diagrams and representations support student understanding.
- Use PLC protocols to establish processes that encourage collaboration and productivity.

Select two of these three-hour modules for a full six-hour day of professional learning.

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<tr>
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<tbody>
<tr>
<td>Teachers</td>
<td>Three hours, onsite</td>
</tr>
</tbody>
</table>

### Agenda:

**Day One:**
- 5 Practices: Level Two
- Using Cool-Downs to Plan Instruction

**Day Two:**
- Curriculum Diagrams and Representations
- Working in a Productive PL

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## Attendees:
Teachers

## Name:
**5 Practices: Looking at Student Work**

## Description:
Gain a deeper understanding of the 5 Practices by selecting and sequencing student work from curriculum lessons and discussing classroom scenarios that could arise and impact instruction.

## Prerequisites:
Teaching and Learning with IM 6–8 Math Curriculum
### Using Cool-downs to Plan Instruction

**Attendees:**
Teachers

**Name:**
Using Cool-downs to Plan Instruction

**Description:**
Use student cool-downs as a formative assessment for identifying how to address student misconceptions or misunderstandings in future lessons, and purposefully differentiate instruction.

**Duration/Format:**
Three hours, onsite

**Prerequisites:**
Teaching and Learning with IM 6–8 Math Curriculum

### Using Pre-Unit Diagnostic Assessments to Plan Instruction

**Attendees:**
Teachers

**Name:**
Using Pre-Unit Diagnostic Assessments to Plan Instruction

**Description:**
Discover how the Pre-Unit Diagnostic Assessment can help uncover student misconceptions or misunderstandings, and illuminate opportunities to address them in future lessons through purposefully differentiated instruction.

**Duration/Format:**
Three hours, onsite

**Prerequisites:**
Teaching and Learning with IM 6–8 Math Curriculum

### Curriculum Diagrams and Representations

**Attendees:**
Teachers

**Name:**
Curriculum Diagrams and Representations

**Description:**
Understand the progression of important mathematical diagrams and representations in the curriculum, and how they help students understand concepts and algorithms.

**Duration/Format:**
Three hours, onsite

**Prerequisites:**
Teaching and Learning with IM 6–8 Math Curriculum

### Working in a Productive PLC

**Attendees:**
Teachers

**Name:**
Working in a Productive PLC

**Description:**
Teachers will learn to collaboratively use PLC Protocols to plan, observe, and reflect on lessons while monitoring self-progress throughout the year. They'll learn to establish processes for working together to more productively use their PLC time for lesson planning based on their students' unique needs.

**Duration/Format:**
Three hours, onsite

**Prerequisites:**
Teaching and Learning with IM 6–8 Math Curriculum
Attendees:
Teachers

Name:
Nine PLCs, one day each

Duration/Format:
Six hours, onsite
Breakdown: 1.5 hours per grade-level group.
One session per grade level, for a total of three
per facilitator per day, plus 1.5 hours for structured
meetings with designated onsite contact who will
do follow-up work with teachers.

Prerequisites:
Teaching and Learning with IM 6–8
Math Curriculum

Description:
In this advanced learning series, teachers choose the topics they’d like to master. These PLC topics
can be repeated as many times as desired.
The three in bold are recommended to do first for all sites.

1. Landing the Lesson: Using Learning Goals for Efficient Activity and Lesson Syntheses
2. Launching the Lesson, so Students Start Strong
3. Supporting Students While They Work
4. Planning with the 5 Practices Framework
5. Planning in Response to the Pre-Unit Diagnostic Assessment
6. Adapting Routines for Extra Support and Extra Challenge
7. Planning in Response to the End-of-Unit Assessment
8. Focus on Planning to Support English Learners
9. Focus on Planning to Support Students with Disabilities
### IM CERTIFIED ALGEBRA 1, GEOMETRY & ALGEBRA 2

High-Level Implementation Paths and School Year Timeline (PL Index to Follow)

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<th>Extension</th>
<th>TEACH &amp; LEARN</th>
<th>DISTRICT ADMINISTRATORS</th>
<th>TEACH &amp; RESPOND</th>
<th>TEACH &amp; LEAD</th>
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<tr>
<td><strong>TEACHERS &amp; COACHES</strong></td>
<td><strong>TEACHERS</strong></td>
<td><strong>Start with:</strong></td>
<td><strong>Start with:</strong></td>
<td><strong>Throughout the school year:</strong></td>
<td><strong>Start with:</strong></td>
</tr>
<tr>
<td>Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum. (Unit 1 Overview included.)</td>
<td>Teaching and Responding with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum. (One day intensive comprised of any two modules below.)</td>
<td><strong>Throughout the school year:</strong></td>
<td><strong>Throughout the school year:</strong></td>
<td><strong>Nine PLCs, one day each</strong></td>
<td><strong>Throughout the school year:</strong></td>
</tr>
<tr>
<td><strong>Curriculum Overview. Observing a Problem-Based Classroom.</strong></td>
<td><strong>5 Practices: Looking at Student Work</strong></td>
<td><strong>Remainder Unit Overviews per Course and Math Modeling Overviews</strong></td>
<td><strong>Using Cool-Downs to Plan Instruction</strong></td>
<td><strong>5 Practices: Looking at a Case Study</strong></td>
<td><strong>Planning and Responding with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum.</strong></td>
</tr>
<tr>
<td><strong>If additional professional learning is desired</strong></td>
<td><strong>Using Pre-Unit Diagnostic Assessments to Plan Instruction</strong></td>
<td><strong>Instructional Routines</strong></td>
<td><strong>Adapted Routines for Extra Support and Extra Challenge</strong></td>
<td><strong>Facilitated Unit and Lesson Planning</strong></td>
<td><strong>Planning in Response to the Pre-Unit Diagnostic Assessment</strong></td>
</tr>
<tr>
<td><strong>5 Practices: Looking at a Case Study</strong></td>
<td><strong>Planning in Response to the End-of-Unit Assessment</strong></td>
<td><strong>Observing a Problem-Based Classroom.</strong></td>
<td><strong>Planned in Response to the End-of-Unit Assessment</strong></td>
<td><strong>Focus on Planning to Support English Learners</strong></td>
<td><strong>Focus on Planning to Support Students with Disabilities</strong></td>
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</table>

IM Coaching is available to support the implementation of the IM curriculum focusing on new teaching practices to support student learning.
Attendees: Teachers and Coaches

Name: Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

Agenda:
Day One:
• Problem-based lesson structure
• Assessment
• Math Content Routines

Day Two:
• 5 Practices
• Math Language Routines
• Teaching Unit 1
• Classroom Norms

Description:
During this two-day implementation onsite event, teachers and coaches will join an IM Certified facilitator for an overview of the IM curricula.

Attendees Will Understand:
• The structure goals of an IM lesson—invitation, deep dive, consolidation/application, and its learning goals.
• The available assessment resources and their purposes.
• Instructional Routines and their value in the IM curriculum.
• The 5 Practices for Orchestrating Mathematical Discussion, applying them throughout the IM curriculum.
• How Math Language Routines in the IM curriculum support English learners and students with disabilities.
• How to organize and plan for Lesson 1.
• Techniques for setting classroom norms that support problem-based learning.

Duration/Format:
12 hours, onsite

Prerequisites:
None
### Math Modeling Overview: Geometry

**Description:**
Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

**Prerequisites:**
Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

**Duration/Format:**
Two hours, onsite or virtual one per course and mathematical modeling overview per course

### Unit Overviews per Course

**Description:**
Unit overviews support teachers to make effective instructional decisions such as engaging students, effective questioning, pacing, formative assessment, and differentiation, through making visible the big ideas and coherence within a unit, and how understanding the trajectory of learning goals across lesson supports effective planning.

**Goals:**
- Take a deep dive into two lessons.
- Understand the learning trajectory and coherence of the unit by reviewing selected activities.
- Collaboratively plan using the curriculum resources and unit assessments.

**Prerequisites:**
Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

**Duration/Format:**
Two hours each (23 total), onsite or virtual one per unit per course and mathematical modeling overview per course

### Math Modeling Overview: Algebra 1

**Description:**
Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts, and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

**Prerequisites:**
Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

**Duration/Format:**
Two hours, onsite or virtual

### Math Modeling Overview: Geometry

**Description:**
Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

**Prerequisites:**
Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

**Duration/Format:**
Two hours, onsite or virtual
Attendees: Teachers

Name: Math Modeling Overview: Algebra 2

Description: Understand what it means to model with mathematics and the role of modeling in high school. Experience one of the course level modeling prompts, and discuss the attributes of different versions of the prompt along with the next steps for using a modeling prompt with students.

Prerequisites: Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

Duration/Format: Two hours, onsite or virtual

Select two of these three-hour modules for a full six-hour day of professional learning.

Attendees: Teachers

Name: 5 Practices: Looking at a Case Study

Description: Gain an understanding of the 5 Practices for Orchestrating Mathematical Discussions, and how the curriculum embeds this planning structure in the materials to support both teacher planning and student learning.

Prerequisites: None

Duration/Format: Three hours, onsite

Attendees: Teachers

Name: Instructional Routines

Description: Understand the purpose and important structures of the Info Gap Math Language Routine and three mathematical content routines used in the IM curriculum: • Notice and Wonder • Math Talk • Which One Doesn’t Belong?

Plan to implement an instructional routine and describe how to use the routine in the classroom.

Prerequisites: None

Duration/Format: Three hours, onsite
<table>
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<tbody>
<tr>
<td>Teachers</td>
<td>Three hours, onsite</td>
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**Name:** Facilitated Unit and Lesson Planning  
**Description:** Collaborate with the IM Certified facilitator on an effective unit and planning structure that focuses the learning across the unit.

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<tbody>
<tr>
<td>District Administrators</td>
<td>Three hours, onsite</td>
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</table>

**Name:** Curriculum Overview  
**Description:** Survey the IM curriculum with a focus on the philosophy and instructional shifts and the resources available in the curriculum for supporting teachers around student understanding and discourse, planning, assessment, and instructional routines.

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</table>

**Name:** Observing a Problem-Based Classroom  
**Description:** Understand important student actions observed in a problem-based classroom, how these actions are supported by curriculum lesson plans, and a process for observing a curriculum lesson.
### Attendees:
Teachers

### Name:
**Teaching and Responding with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum**

### Description:
- 5 Practices: Looking at a Case Study
- 5 Practices: Looking at Student Work
- Instructional Routines
- Facilitated Unit and Lesson Planning
- Using Pre-Unit Diagnostic Assessment to Plan Instruction Using Cool-Downs to Plan Instruction

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Select two of these three-hour modules for a full six-hour day of professional learning.

### Attendees:
Teachers

### Name:
**5 Practices: Looking at Student Work**

### Description:
Gain a deeper understanding of the 5 Practices by selecting and sequencing student work from curriculum lessons and discussing classroom scenarios that could arise and impact instruction.

### Duration/Format:
- Three hours, onsite

### Prerequisites:
None
**Attendees:** Teachers

**Name:** Using Cool-Downs to Plan Instruction

**Description:**
Use student cool-downs as a formative assessment for identifying how to address student misconceptions or misunderstandings in future lessons, and purposefully differentiate instruction.

**Duration/Format:**
Three hours, onsite

**Prerequisites:**
Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum

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**Attendees:** Teachers

**Name:** Using Pre-Unit Diagnostic Assessment to Plan Instruction

**Description:**
Discover how the Pre-Unit Diagnostic Assessment can help uncover student misconceptions or misunderstandings and illuminate opportunities to address them in future lessons through purposefully differentiated instruction.

**Duration/Format:**
Three hours, onsite

**Prerequisites:**
Teaching and Learning with IM Algebra 1, Geometry, and Algebra 2 Math Curriculum
Attendees:
Teachers

Name:
Nine PLCs, one day each

Description:
These PLC topics can be repeated as many times as desired.
The three in bold are recommended to do first for all sites.

1. Landing the Lesson: Using Learning Goals for Efficient Activity and Lesson Syntheses
2. Launching the Lesson, so Students Start Strong
3. Supporting Students While They Work
4. Planning with the 5 Practices framework
5. Planning in response to the Pre-Unit Diagnostic Assessment
6. Adapting Routines for Extra Support and Extra Challenge
7. Planning in response to the End-of-Unit Assessment
8. Focus on Planning to Support English Learners
9. Focus on Planning to Support Students with Disabilities

Duration/Format:
Six hours, onsite
Breakdown: 1.5 hours per grade-level group.
One session per grade level, for a total of three per facilitator per day, plus 1.5 hours for structured meetings with designated onsite contact who will do follow-up work with teachers.

Prerequisites:
None
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• Spend less time printing and more time teaching with reliable delivery of print resources

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