This one-day workshop focuses on the mathematics behind computational fluency and explores approaches to enhancing computational fluency found in the Investigations program. Participants see how classroom routines and 10-minute math activities enhance computational fluency in Grades K–5 classrooms. This workshop also allows participants to experience games from all grades and discuss the learning that occurs throughout each game. At the end of this workshop, participants will be comfortable with strategies necessary to enhance computational fluency in their classrooms.

OUTCOMES:

By the end of the workshop, participants will be able to:

- Engage in and reflect on the mathematics behind computational fluency, and become familiar with some approaches to enhance computational fluency found in the Investigations program.
- Explore activities involving computational fluency found in Investigations Grades K–5.

AGENDA:

(See the following page for extended agenda.)

Introduction

Section 1: The Investigations Curriculum

Section 2: Computational Fluency and Place Value in Investigations

Section 3: Classroom Connections

Section 4: Reflection and Closing
<table>
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<tr>
<th>SECTION</th>
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| Introduction                                 | 30 minutes | Introductions, Outcomes and Agenda  
Activity: Classroom Reflection |
| 1: The Investigations Curriculum             | 20 minutes | Three Pillars of Investigations  
Optional Activity: Investigations Component Overview  
Optional Activity: Lesson Walk-Through |
| 2: Computational Fluency and Place Value in Investigations | 40 minutes | How do Classroom Routines and 10-Minute Math Activities enhance computational fluency?  
Activity: Quick Images  
Optional Activity: Dialogue Box  
Activity: Reflection |
| Break                                        | 15 minutes | |
| 2: Computational Fluency and Place Value in Investigations (continued) | 90 minutes | Computational Fluency and Place Value in Investigations  
Activity: Teacher Note  
Examining the Classroom Routines and 10-Minute Math Activities throughout the Curriculum  
Activity: Expert Groups (Classroom Routines and 10-Minute Math progressions)  
Activity: Group Sharing  
Activity: Reflection |
| Lunch                                        | 30 minutes | |
| 3: Classroom Connections                     | 90 minutes | Classroom Connections: Computational Fluency at Your Grade-Level  
Activity: Computational Fluency at Your Grade-Level  
Activity: Grade-Level Sharing  
Activity: Reflection |
| Break                                        | 15 minutes | |
| 3: Classroom Connections (continued)         | 75 minutes | How do games enhance computational fluency?  
Activity: Game/Activity Strand Trace  
Activity: Debrief |
| 4: Reflection and Closing                    | 15 minutes | Closing  
Activity: Action Plan  
Questions |
| Total                                        | 6 hours | |