



Imagine Math Facts[®]

Logic Model

Imagine Math Facts is a digital education program designed to increase math fact fluency in addition, subtraction, multiplication, and division. The program, designed as an educational video game, differentiates instruction for each user, focuses practice on unlearned math facts, and promotes automaticity of previously learned facts.

The logic model below provides a conceptual model of how Imagine Math Facts is intended to work, the resources required to make it effective, and the outcomes that teachers can expect students to demonstrate.

Program Inputs

IMAGINE MATH FACTS

- Focused fact fluency practice that builds automaticity in addition, subtraction, multiplication, and division
- Targeted and individualized content based on individual student skill level
- 3D gameplay with built-in rewards designed to engage students
- Immediate feedback in response to every problem
- Growth reports and time-to-fluency estimates for teachers
- Bilingual activity dashboards for students
- Pre-tests to determine which facts students should work on and post-tests to determine fluency achievement

IMAGINE LEARNING

- Initial onboarding and implementation support
- Professional development and coaching for teachers and administrators
- Flexible implementation models for content delivery
- Customer support to troubleshoot immediate issues

DISTRICT

- Networked computers with proper memory, media appliances, and headsets
- Adequate classroom or lab space
- Online access to Imagine Math Facts and appropriate bandwidth to support use
- School implementation plan

Classroom Activities

STUDENT ACTIVITIES

- Complete pretest for each assigned operation
- Spend 10–15 minutes per session
- Complete 4–5 sessions per week
- Complete posttest for each assigned operation

TEACHER ACTIVITIES

- Weekly monitoring of in-product reports

Outputs

STUDENT OUTPUTS

- Logged student program usage
- Consistent progress through content of increasing difficulty
- Engagement with program's motivational and competitive features
- Consistent improvement of automaticity and mastery for practiced operations

TEACHER OUTPUTS

- Informed calibration of student educational pathways or supports based on student performance in Imagine Math Facts

Outcomes

SHORT-TERM

- Improved student engagement
- Improved math fact fluency
- Increased performance on measures of mathematics proficiency

LONG-TERM

- Increased student confidence in mathematics
- Increased Algebra readiness and preparedness for other mathematics skills and concepts