Goals & Guardrails
Progress Monitoring
Goal 3: Math Grades 3-8

Office of Evaluation, Research, and Accountability
Math Performance Highlights

- In Math, the District is outpacing other large urban districts nationwide, and similar districts in Pennsylvania, in recovering from the pandemic.

- PSSA Math performance in grades 3-8 increased from 2021-22 to 2022-23.

- Star Math performance in grades 3-8 increased from Fall to Winter 2023-24 and from Winter 2022-23 to Winter 2023-24.

- From Winter 2022-23 to Winter 2023-24, a higher percentage of grade 3-8 students moved up a performance level (22%) on Star Math than dropped a performance level (16%).

- All student groups saw increases in the percentage of students scoring At/Above Grade Level, including English Learners (+4.4 percentage points) and students with IEPs (+1.7 percentage points) between Fall and Winter 2023-24.
Where Have We Been?
The percentage of students in grades 3-8 who scored Proficient or Advanced on the PSSA Math rose from 16.5% in 2021-22 to 20.1% in 2022-23 (+3.6 percentage points).
**Strategic Action 3.2:** Purchase and implement standards-aligned core instructional resources for math (in partnership with teachers, school leaders, and parents/guardians).

### Goal 3
**Math Curriculum**

#### Summer 2023

**Material Distribution**
- **100% of schools** received the needed materials in advance of the start of the school year.

**Trainings**
- **661 SDP Staff** participated in training to new math curriculum before the 2023-2024 school year.
- **3,158 Teachers** attended the Illustrative Math (IM) Teach and Learn in August 2023.

#### September 2023 through January 2024

**IM Math Professional Learning Sessions**
- **3,000+ Teachers** participated in 4 sessions
- **330 School-Based Teacher Leaders** participated in 4 sessions
- **500+ School Leaders** participated in 5 sessions

**Communication with Families**
- **Hosted 6 sessions** for families and community members to learn more about curriculum
What do we know about implementation so far?

➔ 83% of teachers who participated in the training felt prepared to teach the curriculum.

➔ Teachers have the materials they need, but a lack of time is a barrier to implementation.

➔ Less than 5% of teachers and 3% of school leaders identify the materials/resources and professional learning as a barrier for implementation.
Where Are We Now?
Goal 3 Leading Indicators

**Goal 3:** The percentage of students in grades 3-8 who are proficient on the state math assessment

**Leading Indicator 1:** The percentage of students in grades 3-8 who are At Target on the District’s within-year math assessment

**Leading Indicator 2:** The percentage of students in grades 3-8 with high growth on the District’s within-year math assessment

**Leading Indicator 3:** The percentage of students in grades K-2 who are At Target on the District’s required math Curriculum-Based Measures
Indicator 1: At Benchmark on Star Math (Grades 3-8)
The percentage of students in grades 3-8 who scored At/Above Benchmark on Star Math increased from 17.4% in Winter 2022-23 to 19.3% in Winter 2023-24 (±1.9 percentage points).

Goal 3 - Leading Indicator 1: Star Math
Half of all students (50.0%) scored At/Above Benchmark (19.3%) or On Watch (30.7%) in Winter 2023-24.

Goal 3 - Leading Indicator 1: Star Math, Winter 2023-24
A higher percentage of students with higher attendance scored At/Above Benchmark on Star Math in Winter 2023-24.
All race/ethnicity groups increased in the percentage scoring At/Above Benchmark from Fall to Winter 2023-24.
English Learners and students with IEPs increased in the percentage scoring At/Above Benchmark from Fall to Winter 2023-24.
**Indicator 1**
Star Math: At Target

Of current 4th graders in Winter 2023-24 (who were in 3rd grade in 2022-23), more than one in five students (22.0%) moved up at least one performance level on Star Math from the Winter 2022-23 assessment cycle.

<table>
<thead>
<tr>
<th>WHERE THEY STARTED</th>
<th>Performance in 3rd Grade</th>
<th>Winter 2022-23</th>
</tr>
</thead>
<tbody>
<tr>
<td>At/Above Benchmark</td>
<td>16.3%</td>
<td>On Watch 17.2%</td>
</tr>
<tr>
<td>Strategic Intervention</td>
<td>22.0% Improved by at least one performance level</td>
<td></td>
</tr>
<tr>
<td>Intensive Intervention</td>
<td>23.3%</td>
<td></td>
</tr>
</tbody>
</table>

WHERE THEY ARE NOW
Performance in 4th Grade*
Winter 2023-24

- At/Above Benchmark: 15.6% Declined by at least one performance level
- On Watch: 5.7%
- Strategic Intervention: 23.3%

* <50 students who were in 3rd grade in Winter 2022-23 either repeated or skipped a grade in 2023-24 and are not current 4th Graders
Indicator 2: Growth on Star Math (Grades 3-8)
The percentage of students in grades 3-8 who had **High Growth on Star Math** from Fall to Winter **decreased** from 36.7% in 2022-23 to 36.1% in 2023-24 (**-0.6 percentage points**).

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**Goal 3 - Indicator 2: High Growth**

- **2021-2022**: 32.6% (n=44,656)
- **2022-2023**: 36.7% (n=46,689)
- **2023-2024**: 36.1% (n=47,221)
Six out of ten students (60.4%) who scored At/Above Benchmark on Star Math had high growth, compared to 15.1% in Intensive Intervention.

Goal 3 - Leading Indicator 2: High Growth
Percentage of Students with High Growth by Performance Category

- At/Above Benchmark (n=9,422): 60.4%
- On Watch (n=14,768): 43.3%
- Strategic Intervention (n=8,307): 33.0%
- Intensive Intervention (n=14,724): 15.1%
Indicator 3: Proficiency on Math Curriculum Based Measures (Grades K-2)
All grades saw increases in performance on each required curriculum-based measure (CBM) from Fall 2023 to Winter 2023.

This increase is consistent with changes from Fall to Winter in 2021-22 and from Fall to Winter in 2022-23.

The percentage of students in grades K-2 who scored At/Above Benchmark on required Curriculum Based Measures increased from Fall to Winter 2023-24 (between +11.1 and 32.4 percentage points).

**Required CBMs for Grades K-2 with Fall to Winter percentage point change**

<table>
<thead>
<tr>
<th>Kindergarten</th>
<th>Grade 1</th>
<th>Grade 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numeral Recognition (+11.4)</td>
<td>Numeral Recognition*</td>
<td>Addition to 10 (+22.2)</td>
</tr>
<tr>
<td>Quantity Comparison (+19.4)</td>
<td>Quantity Comparison (+15.7)</td>
<td>Addition to 20 (+15.7)</td>
</tr>
<tr>
<td></td>
<td>Addition to 10 (+32.4)</td>
<td>Subtraction from 10 (+11.1)</td>
</tr>
</tbody>
</table>

* Numeral Recognition is only required in the Fall for Grade 1.
Where Are We Going?
Current Activities and Focus for the 2024-25 School Year

- Teachers and School Leaders focus on implementation of Illustrative Math based on professional learning that has been provided to date.

- Two Math professional learning vendors are providing targeted professional learning and coaching to Network staff to build capacity and provide continuous implementation support at the school level.

- Monthly Family Sessions and training for school-based staff to support Math Family initiatives at the school level.

- Planning Summer Learning Opportunities for school leadership teams and teachers to continue to support Illustrative Math Implementation.

- Planning to work with a vendor to design a Curriculum Implementation plan for 2024-25, with a focus on Math and new ELA instructional resources.

- Creation of an Accelerate Philly Schools Plan.