Good Morning NCTM!
Learning Support for Title I Students: Teaching Mathematics

Greywolf Elementary
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360-582-3300

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Learning Support for Title I Students: Teaching Mathematics
“Every Child. Every Moment. Every Day.”

GREYWOLF ELEMENTARY
Our School has Grit!

Kids At Hope

2018 NCTM Convention
“Moving Greywolf from Good to Great!”
Principal Donna Hudson
OH, YOU ARE FROM WASHINGTON?

NO. NOT THAT ONE.

MM. NOT THAT ONE EITHER.

YUP. THAT ONE.
SBA 2016-17 Gains

- SBA Math scores (2016) for ALL students, and for students in SWD and Low Income subgroups (at grade 3, grade 4, and grade 5) showed significant increases in each category when compared to SBA scores from 2015.

- *Proficiency gains in the SWD category exceed the gains in the ALL category at the 3rd, 4th, and 5th grade levels.*
Highlights and Celebrations

- GWE Earned our 5th Washington Achievement Award
- Named a National Title 1 School of Distinction
- Visit by Senator Murray
  - Senator Murray wanted to see a school with sustained success and systems
To Achieve Excellent and Equitable Learning Results, Leaders Must Improve:

1. How students and teachers relate to each other and share beliefs (school culture)
2. How teaching occurs (instructional effectiveness)
3. What is taught (curricular rigor)
   - Common language and models

*Joseph F. Johnson, Jr., Ph.D. (based on studies conducted in collaboration with Cynthia L. Uline, Ph.D. & Lynne G. Perez, Ph.D.)*
591 Students
66 Staff Members
48% F&R
Classroom Counts
  - Kinder: 100
  - 1st: 110
  - 2nd: 96
  - 3rd: 91
  - 4th: 88
  - 5th: 105

114 Students served by LAP (a Tier 2 intervention)
63 Students on IEPs
School-wide Title 1 Program
Facing our “Hard Truths”

- Getting the right people on the bus...
- Did our learning targets reflect the standards?
- We needed to be “Data Driven” not “We’ve always done this” driven...
- We needed to look at our Attitudes/Beliefs “Are all kids capable of success?”
- We could not focus on a deficit model
- We needed to establish a sense of urgency...

4 years later....
### 2015-2016 Smarter Balanced Assessment Participation Rate

<table>
<thead>
<tr>
<th>Subject</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELA</td>
<td>98.0%</td>
</tr>
<tr>
<td>Math</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

#### Performance Levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Rating Range</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGHEST</td>
<td>7.83</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>HIGH</td>
<td>6.77</td>
<td>&lt;7.83</td>
<td></td>
</tr>
<tr>
<td>MODERATE</td>
<td>5.67</td>
<td>&lt;6.77</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>4.15</td>
<td>&lt;5.67</td>
<td></td>
</tr>
<tr>
<td>LOWEST</td>
<td>3.56</td>
<td>&lt;4.15</td>
<td></td>
</tr>
</tbody>
</table>

#### Growth

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>ELA</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Students</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Targeted Subgroup</td>
<td>6.67</td>
<td>7.00</td>
</tr>
</tbody>
</table>

### Achievement Index

- **Proficiency**
  - ELA: 8.00, Math: 8.00, Science: 9.00, Average: 8.33
  - Average: 7.94

- **Growth**
  - All Students: 9.00
  - Targeted Subgroup: 10.00

### 2016 INDEX RATING

- **4.63**
## SBA 2016-17 Scores

<table>
<thead>
<tr>
<th>2016-2017 WA Testing Results</th>
<th>Washington State Average</th>
<th>Greywolf</th>
<th>Above State Average</th>
<th>Points =/- State Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd- English / Language Arts</td>
<td>52.6</td>
<td>60.9</td>
<td>Yes!</td>
<td>+8.3</td>
</tr>
<tr>
<td>4th - English / Language Arts</td>
<td>55.2</td>
<td>79.9</td>
<td>Yes!</td>
<td>+24.7</td>
</tr>
<tr>
<td>5th - English / Language Arts</td>
<td>58.6</td>
<td>70.5</td>
<td>Yes!</td>
<td>+11.9</td>
</tr>
<tr>
<td>3rd- Math</td>
<td>57.8</td>
<td>81.3</td>
<td>Yes!</td>
<td>+23.5</td>
</tr>
<tr>
<td>4th- Math</td>
<td>54.3</td>
<td>87.8</td>
<td>Yes!</td>
<td>+33.5</td>
</tr>
<tr>
<td>5th- Math</td>
<td>48.6</td>
<td>71.2</td>
<td>Yes!</td>
<td>+22.6</td>
</tr>
<tr>
<td>5th- Science</td>
<td>63.4</td>
<td>74.7</td>
<td>Yes!</td>
<td>+11.3</td>
</tr>
<tr>
<td>Grade</td>
<td>Percentage</td>
<td>SWD Passed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd Grade</td>
<td>81%</td>
<td>11 out of 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWD Passed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th Grade</td>
<td>88%</td>
<td>15 out of 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SWD Passed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5th Grade</td>
<td>71%</td>
<td>6 out of 8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NATIONAL TITLE 1
DISTINGUISHED SCHOOL
Greywolf Elementary School
Washington
Closing the achievement gap between student groups
Transformational Cultural Innovations at Greywolf

• Schedule
Community Partnerships: Recognition
Assemblies, Read Across America
Family Engagement

- Family Engagement Nights
- Family Math Night & PTA Provided Dinner
- Early Bird Reader
- Family Movie Night
Intentional Practices
- Lunchtime Slide shows- filling gaps whenever we can
- Gym Walls- a culture of success
- Bathroom doors- Nothing is off limits!
- Encouraging bulletin board displays
Lunch time slide show...

October Disability Awareness

Look to the future. Nothing will stop me not even...

Epilepsy

Epilepsy is a common chronic neurological disease that is characterized by recurrent unprovoked seizures. It is usually controlled, but not cured, with medication. Although surgery may be considered in difficult cases.

Margaux Hemingway - Model and Actress

Charles Dickens - English Novelist

Theodore Roosevelt - 26th President of the U.S.

Chadia Gehra - American Ice Hockey Player

The History of our Nation

38th President:
1974-1977

Did you know?
- He was born Leslie Lynch King, Jr.
- Ford was the first president to be an Eagle Scout.
- Ford was on the University of Michigan football team from 1931 to 1934. He was offered tryouts by both the Green Bay Packers and the Detroit Lions.
- Ford's daughter Susan was President Carter's White House.

The History of our Nation

National Women's History Month

Women Who Made History

Did you know?

Amelia Earhart (1897-1937)

Amelia Earhart was the first woman to ever fly solo across the Atlantic in 1932 and she became the first woman in 1935 to fly solo from Hawaii to California. She embarked upon her lifelong dream of flying across the world in 1937, however, her flight went missing on that trip and she was never seen again. How old was she when she went missing?

School Skill: Following Directions

1. __________ carefully to the direction.
2. Ask __________ about anything you don’t understand.
3. __________ the direction to the person (or to yourself.)
4. __________ fill in a blank.
Greywolf hallway bulletin boards... building on Hope!

- **TOADALLY FABULOUS FOURTH GRADERS**
  - NO EXCEPTIONS!

- **YOUR FUTURE IS SO BRIGHT**

- **We are painting bright futures!**

- **TODAY A READER, TOMORROW A LEADER**
Instilling a Growth Mindset . . .

With math I can learn counting, writing numbers, and solving number bonds.

With math I can count all my things.

With math I can learn addition and subtraction.

Math makes you smart!

I can learn math in class.

Math helps me with adding.

Kids at Hope can accomplish anything.
System Solutions

- Systems solutions to real school problems-
  - Monday Meetings
    - Building Connections between Tier 1,2,3 programs
    - On Demand Professional Development
    - Working collaboratively to reduce the teaching and learning cycle
Doing fewer things better

- Strong, highly aligned math curriculum - Eureka
- Inclusion Model
- Title Math teacher teaming with our teachers
Culture of Success: We are a “Math” School
Greywolf didn’t improve culture, and THEN work towards improving instruction and student learning. They changed culture through the work.

The likelihood of progress increases when we use a systems approach to align our efforts.
Curriculum. An excellent mathematics program includes a curriculum that develops important mathematics along coherent learning progressions and develops connections among areas of mathematical study and between mathematics and the real world.
Our Story

“T’m not much of a hunter or gatherer. I’m more of a borrower.”
What is taught?
Greywolf Elementary has achieved excellent and equitable learning results through high-quality, rigorous, standards-aligned math curriculum.

Eureka Math
Adopted K-5

EdReports.org

Instructional materials are a serious lever for change. Research is clear that challenging instruction materials contributes to student learning, narrows the achievement gaps, and empowers students.
Learning Together as Teachers

To improve teaching and learning we weave together the curriculum and standards students engage with every day with targeted and systematic PD.

By integrating curriculum into professional learning, Greywolf teachers can focus on their essential roles: creating engaging learning environments and delivering excellent instruction, assessing and responding to the demonstrated needs of their students, and continuously improving their craft.

PD linked to curriculum can lead to transformational changes in teaching and learning.
We believe:
Real change starts with DATA,
DATA is a tool for surgical planning and instruction,
The shorter the delay between recognizing a learning gap and taking action, the more likely the gap closes.

All students can engage with grade-level work even with gaps in prior grade level skills. Some prior grade-level content is prerequisite work, while other prior grade-level content can be mastered while studying on-grade-level content.
We believe all students need to spend as much time as possible engaging with on-grade-level content!
# MATH EXIT TICKET
(barometer for student success)

## STUDENT AND TEACHER TRACKING

### MATH EXIT TICKET TRACKING FORM for

**Grade 2 Module 7**

**Problem Solving with Length, Money, and Data**

<table>
<thead>
<tr>
<th>LESSON</th>
<th>LEARNING TARGET</th>
<th>SCORE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sort and record data into a table using up to four categories; use data to solve word problems.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Draw and label a picture graph to represent data with up to four categories.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Draw and label a bar graph to represent data; relate the count scale to the number line.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Draw a bar graph to represent a given data set.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Solve word problems using data presented in a bar graph.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Recognize the value of coins and count up to find their total value.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Solve word problems involving the total value of a group of coins.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Solve word problems involving the total value of a group of bills.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Solve word problems involving different combinations of coins with the same total value.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Use the fewest number of coins to make a given value.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Use different strategies to make $1 or make change from $1.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>Solve word problems involving different ways to make change from $1.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Solve two-step word problems involving dollars or cents with totals within $1.00 or $1.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Test</td>
<td>Mid-Module Assessment</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Chart and Diagram

The chart and diagram provide a visual representation of student performance across various lesson topics and standards, with color-coding to indicate different levels of proficiency and needs for remediation or major work. The chart includes columns for remediation, major work, supporting work, and additional work, with corresponding standards and lesson numbers for each area.
Daily Formative Assessment (Exit Tickets)

- **Assess**
- **Teach**
- **Plan**
- **Analyze**

**Universal (60 minutes)**
Grade Level Standards
High Rigor and Difficulty Level

**Strategic**
Grade Level Priority Standards
High Rigor and Difficulty Level

**Intensive**
Grade Level Foundational & Priority Standards
High Rigor and Difficulty Level

Continuum of Math Support for All Students at Greywolf Elementary (90 minutes)

**ALL**
- Fluency Practice
- Application Problems
- Concept Development
- Student Debrief

**SOME**

**Few**
Unit Fraction $= \frac{1}{6}$
Units shaded $= \frac{5}{6}$
Shaded $= \frac{8}{8}$
How Will You Put the Principles to Actions: Ensuring Mathematical Success for All Your Students?

The 3 Spheres of Control

Outside of my control

What you can influence

What you can control.
QUESTIONS

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