




SLIFE Math: Eight Years in One

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Stacy teaches Spanish Native Language Literary, ESL, and co-teaches math. She changed careers from international banking to teaching to share her love of languages with immigrant students.

Jordan teaches SLIFE Math, SEI Algebra I, and Algebra II. She majored in Middle School Math Education and Spanish, where she found her passion for dual language education.



Viviana teaches ESL Content (The Language of Science), ESL, and co-teaches math. She has taught EFL, ESL, Science, Portuguese, and Spanish to every grade from K to Adult Ed, in private and public schools for the past 26 years.





WHO

ARE

YOU?

SLIFE Students

| ✓ | Criteria |
|----|---|
| 1. | English Language Learner as defined by Chapter 71A of the General Law |
| 2. | Aged 8 to 21 |
| 3. | ELL entered a school in the US after grade 2 OR Exited the US for six months or more |
| 4. | Extent of prior exposure to formal schooling is characterized by a. no formal schooling OR b. interruptions in formal schooling OR c. consistent, but limited formal schooling |
| 5. | Functions two or more years below expected grade level in native language literacy relative to typical peers. |
| 6. | Functions two or more years below expected grade level in numeracy relative to typical peers. |

All criteria must be met

Math

SLIFE Program

- ESL Class
- Content ESL Class
- Native Language Literacy
- Pre-Algebra Class
- Technology Class
- Elective Classes

1 year program

2 levels based on
academic readiness

≈ 25 students total

Preparing students
for ESL and SEI
classes the
following year

SLIFE Math Class - Timeline

August - February

- All SLIFE students in one class with Math teacher, two ESL teachers, and bilingual paraprofessional
- Students seated in groups based on level and/or behavior
- Math teacher delivers direct instruction
- Each teacher and paraprofessional works with one group to reinforce concepts and assess student progress
- Based on need, one ESL teacher may pull out small groups of students to drill concepts

March - June

- Split SLIFE class into two levels
- Each level meets with math teacher every other day
- On off days, each level meets with ESL teacher
- Math teacher presents and teaches concepts
- ESL teachers reinforce concepts and provide additional practice

SLIFE Math Class - Coteaching

Math Teacher

- Designs scope and sequence
- Direct whole-class instruction
- Formal assessment
- Identify students needing support

ESL Teachers

- Language input for scope and sequence
- Whole-class re-teaching of concepts
- Reinforcement for individual students
- Informal assessment

Mathematical concepts + Bilingual Scaffolding = Math and Language Gains

- Using a Sheltered English Instruction approach, students succeeded through reinforcement of math concepts by bilingual teachers.
- Students learned English of mathematics while learning mathematical concepts.

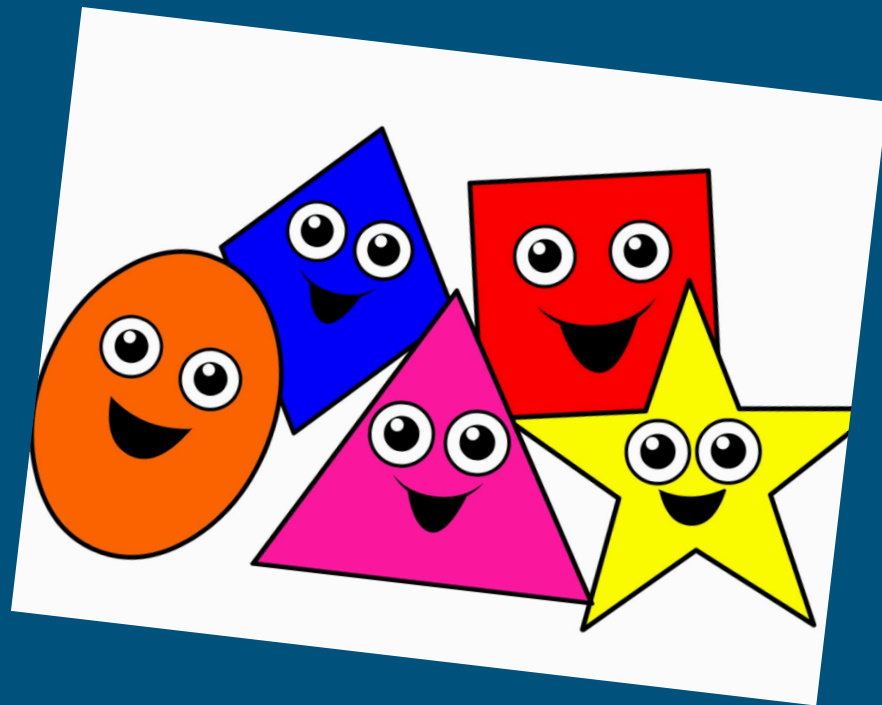
SLIFE Scope and Sequence

- Addition and Subtraction
 - Decimals
- Multiplication
 - Decimals
- Division
- Multiples and Factors
- Geometry
- Fractions
- Order of Operations
- Operations with Integers

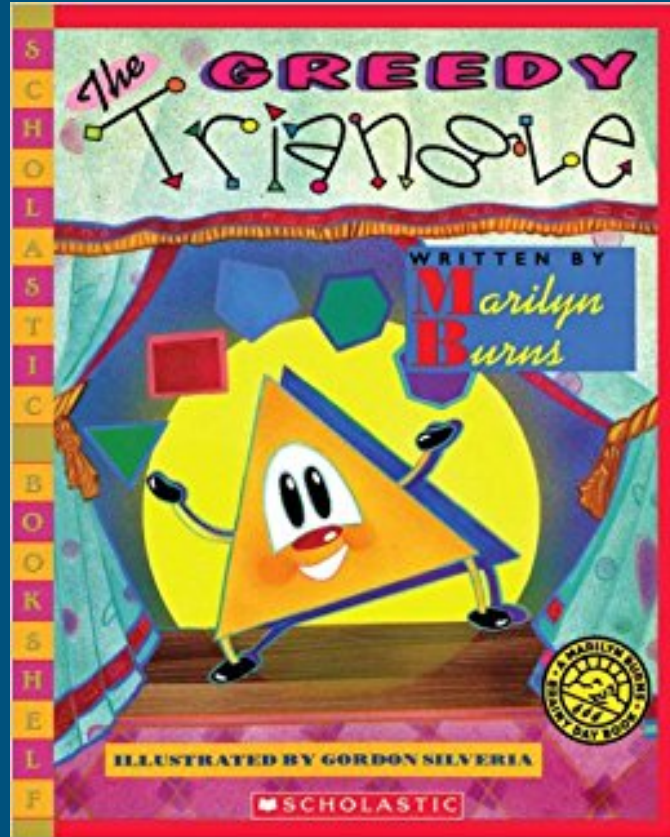


Geometry Unit Sequence

- Two-Dimensional Figures
- Three-Dimensional Figures
- Perimeter
- Area
- Surface Area
- Volume



The Greedy Triangle



Resources

Name: _____ Class: _____ Date: _____

3-D Figure Chart

| Figure | Picture | Faces | Edges | Vertices | Real World Example |
|-------------------|---------|-------|-------|----------|--------------------|
| Cube | | | | | |
| Rectangular Prism | | | | | |
| Pentagonal Prism | | | | | |
| Square Pyramid | | | | | |
| Hexagonal Pyramid | | | | | |

| | | | | | |
|--------------------|--|--|--|--|--|
| Hexagonal Prism | | | | | |
| Triangular Pyramid | | | | | |
| Cone | | | | | |
| Triangular Prism | | | | | |
| Cylinder | | | | | |
| Pentagonal Pyramid | | | | | |

Formula Chart

Name: _____ Class: _____ Date: _____

Geometry Formula Chart

Perimeter:

Example:

Area:

| Shape | Formula | Example |
|-----------|---------|---------|
| Square | | |
| Rectangle | | |
| Triangle | | |
| Trapezoid | | |