

# Pequannock Township School District Curriculum Syllabus

## PAWS Grade 4

### Course Description:

The PAWS curriculum is designed to support all students in the development of number sense, fluency, and an understanding of mathematical concepts. The curriculum is a guide for teachers as they determine the best ways to support their students in progressing in the aforementioned areas.

### Course Standards:

The following is a list of NJSLs that describe what students are expected to know and be able to do as a result of successfully completing this course. The following NJSLs are the basis of the assessment of student achievement. The learner will demonstrate mastery of:

#### Operations & Algebraic Thinking

1. Use the four operations with whole numbers to solve problems.  
*4.OA.A.1, 4.OA.A.2, 4.OA.A.3*
2. Gain familiarity with factors and multiples.  
*4.OA.B.4*
3. Generate and analyze patterns.  
*4.OA.C.5*

#### Number & Operations in Base Ten

4. Generalize place value understanding for multi-digit whole numbers.  
*4.NBT.A.1*
5. Use place value understanding and properties of operations to perform multi-digit arithmetic.  
*4.NBT.B.4, 4.NBT.B.5, 4.NBT.B.6*

#### Measurement & Data

6. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.  
*4.MD.A.3*

#### Standards for Mathematical Practice

1. Construct viable arguments and critique the reasoning of others. *SMP3*
2. Look for and make use of structure. *SMP7*
3. Look for and express regularity in repeated reasoning. *SMP8*

## Scope and Sequence

<p><b>Unit 1 (Trimester 1)</b></p> <p>Number Talk Unit 1  Fluency Unit 1: Focus on Multiplication 0-10  PAWS Project 1: Applying the Mathematical Practices to Multiplication and Division</p>
<p><b>Unit 2 (Trimester 2 )</b></p> <p>Number Talk Unit 2  Fluency Unit 2: Focus on Division  PAWS Project 2: Solving Complex Problems</p>
<p><b>Unit 3 (Trimester 3 )</b></p> <p>Number Talk Unit 3  Fluency Unit 3: Focus on Multiplication and Division  PAWS Project 3: Mindset Mathematics</p>

## Assessments

Evaluation of student achievement in this course will be based on the following:

- a. Teacher observation
- b. Student self-monitoring of progress

## Curriculum Resources

### Instructional Resources:

- Number Talks: Helping Children Build Mental Math and Computation Strategies
- *Games and Tools for Teaching Multiplication Facts* by Jennifer Bay-Williams and Gina Kling (folio)
- *Mastering the Basic Math Facts in Multiplication and Division* by Susan O’Connell and John SanGiovanni

## Home and School Connection

The following are suggestions and/or resources that will help parents support their children:

- YouCubed parent resources: <https://www.youcubed.org/resource/parent-resources/>
- Table Talk Math parent resources: <https://www.tabletalkmath.com/resources.html>
- [Fluency Without Fear: Research Evidence on the Best Ways to Learn Math Facts](#)

