

**Board of Education
Newtown, Connecticut**

Minutes of the Board of Education budget workshop on February 4, 2020 at 7:00 p.m. in the Council Chambers at 3 Primrose Street.

M. Ku, Chair	L. Rodrigue
D. Delia, Vice Chair	A. Uberti
D. Cruson, Secretary	R. Bienkowski
D. Leidlein (7:30 p.m.)	14 Staff
J. Vouros	2 Press
R. Harriman-Stites	5 Public
D. Zukowski	

Mrs. Ku called the meeting to order at 7:00 p.m.

Item 1 – Pledge of Allegiance

Item 2 – Public Participation – none

Item 3 – Second Read and Possible Action on Grade 4 Math Curriculum

MOTION: Mr. Delia moved that the Board of Education approve the Grade 4 Math Curriculum. Mr. Cruson seconded.

Dan Delia thanked the committee for their hard work which was impressive. Motion passes unanimously.

Item 4 – Special Education Out-of-District Transportation Contract

MOTION: Mr. Delia moved that the Board of Education approve the Out-of-District Special Needs Transportation Services Contract to EdAdvance for the period of five (5) years beginning July 1, 2020 and terminating on June 30, 2025 at the rates as bid on January 10, 2020. Mr. Cruson seconded.

Mr. Delia said the CIP Committee met January 29 and discussed the transportation bids. He thanked those present at the meeting which included Debbie Leidlein, Bob Gerbert, Dr. Rodrigue, Deb Zukowski, Ron Bienkowski, Deb Petersen, Sally Lynch, Tanya Vadas and Rick Spreyer.

We received five bids, interviewed two companies, and chose EdAdvance. Mrs. Vadas provided a financial analysis and Sally Lynch, Deb Petersen and Rick Spreyer spoke about our experience with EdAdvance. He fully supports this decision.

Mrs. Zukowski said EdAdvance had the lowest price of the group and they provide our transportation now as well as for surrounding towns. In addition to being the lowest bid, Deb Petersen said that their experience with EdAdvance was quite positive. Also, as EdAdvance serves nearby districts, Newtown would be more likely to benefit from sharing rides with other districts to lower overall transportation costs.

Mrs. Ku said because she serves on the EdAdvance Board of Directors she would abstain from voting as a conflict of interest.

Vote: 5 ayes, 1 abstained (Mrs. Ku) Motion passes.

Item 5 – Schedule Update – Elementary Schools

Dr. Rodrigue addressed concerns about the elementary 6-day schedule. This grew out of a discussion regarding the benefits of this for students and staff for having a common, flexible schedule not tied to the calendar day. This will allow the inclusion of science instruction, Spanish in its own instructional space in the schedule, and a way to mitigate natural losses in

instructional time that occurs every year. This is related to the budget in terms of spending dollars in resources, professional development, texts and units of study without being able to fit this in at the elementary level. The 5-day schedule has losses in instruction and allows little flexibility.

Mr. Moretti stated that this concept started because of the struggles teachers are having fitting everything into their day. The 6-day schedule came out of that conversation. It allows us to have larger blocks of time on certain days. We can't do that now without cutting something else. Dr. Gombos said we will not lose art or music classes.

Mr. Geissler said they have increased instructional demands and it's difficult to have the needed classes.

Dr. Rodrigue said it's not easy to find that balance with Spanish, science and academics while giving time to the arts.

Mrs. Zukowski noted that regarding art and music we are spending a lot of effort on SEL but art and science are also tools therapists use to help children.

Mr. Cruson said it sounded like there was a concern about art shows being impacted and asked if there were plans to look at music and art and add oversight to it to see if things could be changed for the better.

Mr. Moretti stated that he has heard art show comments for a while. The art teacher that retired when he started had large art shows. When she retired the new teacher was asked by parents to help but she did not tap into that help. Shortly after that the art teachers began being shared between buildings. We should have mapped out what a quality art show would look like and have it be uniform between the four elementary schools.

Mrs. Harriman-Stites asked the impact of the 6-day schedule for students who get enrichment or are pulled out for services.

Mr. Geissler said we have to put in lunch, recess, and the interventions and enrichments as well as not lose PLC time.

Mrs. Leidlein commended them for looking at this which is in the best interest of the students. Parents have the hardest time changing but the students adapt well.

Mr. Delia asked the plan to stay ahead communication-wise and share with the Board.

Mrs. Uberti said we are early in the process and only laid out a portion of the schedule. A lot of work needs to be done including how we communicate this. We have not had a full discussion with staff yet. We want parents to know that everyone is on the same page.

Item 6 – Discussion and Possible Action on 2020-2021 Budget

MOTION: Mr. Delia moved that the Board of Education adopt the Superintendent's recommended budget for \$79,281,774. Mr. Cruson seconded.

MOTION: Mr. Delia moved that the Board of Education amend the motion to accept the technical adjustments as presented for a total reduction of \$34,065. Mr. Cruson seconded

Mr. Bienkowski spoke about the technical adjustments which included liability insurance for \$7,506, property insurance for \$4,064, out-of-district transportation for \$20,000, and National Superintendent's Roundtable for \$2,495.

Motion passes unanimously.

Dr. Rodrigue spoke about the BOE adjustments which include the special education teacher for the SAIL Program at the middle school for \$61,961, the health and wellness teacher less the grant for \$35,000 for a cost of \$29,316, the Bounce Back trauma awareness training for staff for \$2,500, and the Diversity Program for students for \$7,500.

MOTION: Mrs. Harriman-Stites moved to increase the proposed budget by \$101,277 as presented by the Superintendent. Mrs. Leidlein seconded.

Mrs. Leidlein asked how many teachers will train for Bounce Back.

Mrs. Uberti said that we will potentially train counselors at the elementary schools. We have a trained staff member who can train others.

Mr. Vouros feels the Diversity Program should be for the elementary students also.

Dr. Rodrigue was not sure that this group deals with elementary but we would look at other programs.

Mr. Vouros feels it was essential to have it for K-6 students.

Motion passes unanimously.

Mrs. Ku spoke about our current positive balance and asked if there were things we could pay for from the surplus this year.

Mr. Bienkowski said we have a \$436,000 surplus. We could purchase these items with little risk to this year's budget. He expects an uptick in special education tuition for half of the school year for \$100,000 to \$150,000. We will have a balance of \$200,000 remaining. He is confident we can handle all of these items.

MOTION: Mr. Delia moved to reduce the budget by \$97,210 for the purchase of one concert tuba for \$7,700, one Lacrosse goal for \$1,850, Stepping Stones textbooks for \$28,000, Envision textbooks for \$14,000, two ride-on floor scrubbers for \$15,000 each for the middle school and Middle Gate School, one walk-behind floor scrubber for Hawley School and one maker space for the middle school for \$8,160. Mr. Cruson seconded. Motion passes unanimously.

Mrs. Zukowski compared our budget from 2010 when the high school addition opened. She asked why there were two school psychologists at Sandy Hook School and was not sure why we needed a guidance counselor in each elementary school.

Dr. Rodrigue said we clarified the psychologist and social worker positions at Reed and the middle school. Counselors are support personnel and many in the elementary schools were grant funded. We need one in each elementary school. Sandy Hook School has the pre-school which is why they need two psychologists.

Mrs. Petersen stated that the pre-school always had a psychologist. The other psychologist does the same as the ones in the other three elementary schools. The behavior analysts oversee the pre-school and the autism program at Middle Gate School. They do observations and assist teachers with students. One works with SEAL Program at Hawley and also works at the high school in the SAIL Program. One picks up the other schools and helps with a high school student.

Mrs. Zukowski wanted to learn more about what the staff does in these positions.

MOTION: Mr. Delia moved to reduce the allowance for savings from turnover for \$97,000.

Mr. Cruson seconded.

Mr. Delia took the average actual figures over the last three year and felt it was reasonable to expect the average to stay the same.

Mrs. Leidlein asked Mr. Bienkowski how we came to that number and his thoughts on motion.

Mr. Bienkowski said the numbers have been favorable and this year we have budgeted \$375,000. With the proposed adjustment it would be \$472,000. This is the highest since we had the early retirement incentive. We could adjust that number but he would be more comfortable with \$50,000. Whatever we do will put stress on next year's budget.

Mrs. Leidlein spoke about amending the motion to adjust Mr. Delia's number to \$50,000 instead of \$97,000.

Mr. Delia was trying to come closer to the actual number.

Mrs. Harriman-Stites was concerned that we might be over-expecting and felt there should be an adjustment but not with a number that high.

Mrs. Zukowsk asked what would happen if it's too aggressive an adjustment.

Mr. Bienkowski said we would have to manage our way thought that shortfall with a budget freeze on discretionary spending that can be delayed. We look at expenses every month. If it was right we could take control of expenses.

Mr. Delia called the question.

Mrs. Ku said that would require a second, was not debatable, and had a 2/3 member vote on the question

Mrs. Zukowski seconded the motion to call the question

Vote on motion ending debate passes unanimously.

Vote on amendment to reduce by \$97,000: 2 ayes, 5 nays (Mrs. Ku, Mr. Cruson, Mrs. Leidlein, Mr. Vouros, Mrs. Harriman-Stites) Motion fails.

MOTION: Mrs. Leidlein moved to adjust the allowance for turnover by \$50,000. Mr. Vouros seconded.

Mrs. Leidlein trusts Mr. Bienkowski's judgement. It is an unknown factor and would prefer to defer to his experience.

Motion passes unanimously.

Mr. Bienkowski said at this time the total adjustments are approximately \$80,000 with an overall reduction of approximately .11%.

Mr. Delia asked the discrepancy between building and ground repairs and emergency repairs.

Mr. Bienkowski said we budgeted these amounts over the past several years but we don't know what might break down. Right now we are 76% spent. Based on the history we will probably over-expend these accounts.

MOTION: Mr. Delia moved to amend the original motion to adopt the Superintendent's recommended budget for a total of \$79,201,776. Mr. Cruson seconded. Motion passes unanimously.

Mr. Delia thanked Mr. Bienkowski, Dr. Rodrigue and Mrs. Vadas for their hard work on the budget.

Mrs. Zukowski thinks the budget is about as tight as it is comfortable to be and thanked everyone for their good job.

Mrs. Ku thanked all of the Board members and everyone who participates in this process. We've had difficult discussions and thoughtful decisions by everyone.

Mrs. Leidlein thanked the public who shared their ideas and thoughts as we reflected and discussed this budget.

Vote on main motion to adopt the budget: Motion passes unanimously.

MOTION: Mr. Delia moved that the Board of Education direct the business office to prepare the final budget and authorize the Director of Business to make any technical and arithmetical changes. Mr. Cruson. Motion passes unanimously.

Item 7 – Public Participation – none

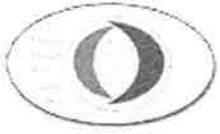
MOTION: Mrs. Leidlein moved to adjourn. Mr. Cruson seconded. Motion passes unanimously.

Item 8 – Adjournment

The meeting adjourned at 9:03 p.m.

Respectfully submitted:

Daniel J. Cruson, Jr.
Secretary



District Elementary > Grade 4 > Mathematics > Math Grade 4

5 Curriculum Developers

	Lessons	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
		1 2 3 4	5 6 7 8 9	10 11 12	13 14 15	16 17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38	
Unit:												
Using Place Value	0	█										
Multiplication and Division	0	█										
Measurement and Data	0		█									
Fractions	0				█							
Geometry	0					█						
		1 2 3 4	5 6 7 8 9	10 11 12	13 14 15	16 17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38	





Unit Planner: Using Place Value Math Grade 4

Thursday, December 11, 2014, 3:24 PM

District Elementary > 2019-2020 > Grade 4 > Mathematics > Math Grade 4 > Week 1 - Week 12

Last Updated: Today by Jill Bracksieck

Using Place Value

Bracksieck, Jill; Connors, Jenna; Feda, Kristine; Hiruo, Amy; Pierce, Chrissie

- [Unit Planner](#)
- [Lesson Planner](#)

Concept-Based Unit Development Graphic Organizer (Download)

Unit Web Template (Optional)

Concepts / Conceptual Lens

Please attach your completed Unit Web Template here
System and Structure

Generalizations / Enduring Understandings

Strand 1: Multi-Digit numbers

Generalizations

Numbers can be compared using place value in the base ten system.

Digits correspond to different values depending on their place in a number.

Concepts

- comparison
- numbers
- base ten

Strand 2: Place Value Strategies for Addition and Subtraction

Generalizations

Numbers can be added and subtracted using place value.

Numbers can be rounded to estimate.

Concepts

- place value
- addition
- subtraction
- estimation
- rounding

Guiding Questions

Please identify the type of question: (F) Factual, (C) Conceptual, (P) Provocative [Debatable]

Factual:

What is the value of each digit in a multi-digit number?
What are the steps in the standard algorithm?

Conceptual:

How can understanding place value of tens and ones improve understanding larger numbers?
How does the value of a digit change when its place changes?
How does understanding place value help in solving multi-digit subtraction problems?
How are the steps in the standard algorithm related to regrouping?
What computation models are best suited to a given problem?

Provocative:

Is place value important? Why?
When is estimation valuable? Why?

Standard(s)

Connecticut Core Standards / Content Standards

CCSS: Mathematics

CCSS: Grade 4

Operations & Algebraic Thinking

4.OA.A. Use the four operations with whole numbers to solve problems.

4.OA.A.3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Number & Operations in Base Ten

4.NBT.A. Generalize place value understanding for multi-digit whole numbers.

4.NBT.A.1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.

4.NBT.A.2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

4.NBT.A.3. Use place value understanding to round multi-digit whole numbers to any place.

4.NBT.B. Use place value understanding and properties of operations to perform multi-digit arithmetic.

4.NBT.B.4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.

Mathematical Practice

MP. The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Objective(s)

Bloom/ Anderson Taxonomy / DOK Language

- Describe the multiplicative relationship in the place value system
- Represent six-digit numbers

- Compare and order multi-digit numbers
- Round multi-digit numbers
- Estimate the sum and difference of two numbers
- Round three-digit numbers to add and subtract
- Use the standard algorithm to add up to six-digit numbers (with composing)
- Solve addition and subtraction word problems
- Use the standard algorithm to subtract up to five-digit numbers from up to five-digit numbers (with decomposing)

Critical Content & Skills

What students must KNOW and be able to DO

- **Represent, round, compare and order multi-digit numbers.**
- **Add and subtract using the standard algorithm to solve word problems with composing and decomposing.**
- **Estimate the sum and difference of multi-digit numbers.**
- **Describe the multiplicative relationship in the place value system.**

Core Learning Activities

Represent, round, compare and order multi-digit numbers.

- use base ten blocks, abacus, number expander, and number line (standard and curved) to model place value
- build a picture of 100,000
- use place value understanding to round multi-digit whole numbers to any place

Use the standard algorithm to add and subtract to solve word problems with composing and decomposing.

- use base ten blocks, number mats and graph paper (to align place value) to add and subtract
- explain the steps of the standard algorithm describing the value of each place
- use the standard algorithm with multiple addends

Estimate the sum and difference of multi-digit numbers.

- round numbers to estimate to find reasonable answers

Describe the multiplicative relationship in the place value system.

- build a picture of 100,000 and 1,000,000
- use abacus and place value chart to explore place value relationships

Assessments

Pretest

Formative: Written Test

Observations

Formative: Other oral assessments

Portfolio

Formative: Student Portfolio

Check Ups

Summative: Written Test

Performance Tasks

Summative: Other written assessments

Interview

Summative: Other oral assessments

Resources

Professional & Student

Professional and Student

Student Resources

Stepping Stones Student Journal

Stepping Stones Number Case

Stepping Stones Fundamentals Games: Top Score Too, Jump On, Tricky Totals, Just Add, Add to Win, Make a Difference

[M1 Check-up 1.pdf](#)
[M1 Performance tasks.pdf](#)
[M2 Check-up 1.pdf](#)
[M2 Performance tasks.pdf](#)
[M3 Check-up 1.pdf](#)
[M3 Performance tasks.pdf](#)
[M4 Check-up 1.pdf](#)
[M4 Performance tasks.pdf](#)

Stepping Stones Pretest, Check-ups, and Performance Tasks are found in the assessment tab of each module

District approved websites and apps as needed

Professional Resources

Stepping Stones Online Resources

Student Learning Expectation & 21st Century Skills

[Information Literacy](#)
[Critical Thinking](#)
[Spoken Communication](#)
[Written Performance](#)

Interdisciplinary Connections

Stepping Stones: (More math --> Cross-curricula links)

- Word Search (Module 1): language arts
- Human Abacus (Module 1): sports and recreation
- Number Movers (Module 2): sports and recreation
- Comparing Technology (Module 2): technology
- Making One Million (Module 3): social studies
- Rounding Run (Module 3): sports and recreation
- Word Search (Module 4): language arts
- Number Movers (Module 4): sports and recreation



Atlas Version 9.5

© 2019 [Faria Education Group Ltd.](#) All rights reserved. [Privacy Policy](#)



Unit Planner: Multiplication and Division

Math Grade 4

Tuesday, December 19, 2017 2:23 PM

District Elementary > 2019-2020 > Grade 4 > Mathematics > Math Grade 4 > Week 2 - Week 35

Last Updated: Today by Jill Bracksieck

Multiplication and Division

Bracksieck, Jill; Connors, Jenna; Feda, Kristine; Hiruo, Amy; Pierce, Chrissie

- [Unit Planner](#)
- [Lesson Planner](#)

Concept-Based Unit Development Graphic Organizer (Download)

Unit Web Template (Optional)

Concepts / Conceptual Lens

Please attach your completed Unit Web Template here
Patterns

Generalizations / Enduring Understandings

Strand 1: Fluency Strategies for Multiplication and Division

Generalization

Strategies assist in the recall of multiplication and division facts.

Concepts

- strategies
- multiplication
- division

Strand 2: Factors and Multiples

Generalization

Multiples consist of two or more factors.

Concepts

- factors
- multiples
- prime
- composite

Strand 3: Place Value Strategies for Multiplication and Division

Generalization

Place value assists in solving multi-digit multiplication and division problems.

Concepts

- area model
- partial products
- equation
- array

Guiding Questions

Please identify the type of question: (F) Factual, (C) Conceptual, (P) Provocative [Debatable]

Factual:

What strategies help in mastering multiplication and division facts?

What are the divisibility rules for 2, 5 and 10?

What is a prime/composite number?

Conceptual:

What do remainders represent?

How can a number be broken down into its smallest factors?

How can patterns be used to solve problems?

How do multiplication and division help solve real world problems?

How does the area model to explain multiplication?

Provocative:

Is it important to understand mathematical patterns?

Why? Why not?

Where are mathematical patterns observed in daily life?

Strand 4: Patterns**Generalization**

Patterns follow rules.

Concepts

- rules
- patterns
- analysis

Strand 5: Comparison**Generalization**

Comparisons illustrate the relationship between multiplication and division.

Concepts

- comparisons

Standard(s)

Connecticut Core Standards / Content Standards

CCSS: Mathematics**CCSS: Grade 4****Operations & Algebraic Thinking****4.OA.A. Use the four operations with whole numbers to solve problems.**

4.OA.A.1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

4.OA.A.2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

4.OA.A.3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

4.OA.B. Gain familiarity with factors and multiples.

4.OA.B.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

4.OA.C. Generate and analyze patterns.

4.OA.C.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

Number & Operations in Base Ten**4.NBT.B. Use place value understanding and properties of operations to perform multi-digit arithmetic.**

4.NBT.B.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

4.NBT.B.6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors,

using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Mathematical Practice

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Objective(s)

Bloom/ Anderson Taxonomy / DOK Language

Fluency Strategies for Multiplication and Division

Use a strategy (i.e. double and halve, double-double-double) to multiply and divide by one- and two-digit numbers
Relate multiplication and division

Factors and Multiples

Identify factors and multiples of one- and two-digit numbers
Identify prime and composite numbers

Place Value Models/Strategies for Multiplication and Division

Calculate quotients and remainders using the partial quotient (area) model to divide multi-digit numbers by one-digit numbers
Calculate products using the partial product (area) model to multiply multi-digit numbers by a one-digit whole number or two two-digit numbers
Estimate the quotient or product of two numbers

Use the standard algorithm to multiply
Solve multiplication and division (with and without remainders) word problems

Patterns

Apply a rule for a number pattern
Identify features of patterns
Use patterns to multiply one-digit numbers by multiples of ten

Comparison

Identify comparisons involving addition or multiplication
Represent multiplication and division using tape diagrams
Identify comparisons involving subtraction or division

Critical Content & Skills

Core Learning Activities

What students must **KNOW** and be able to **DO**

- Solve multiplication and division problems using strategies.
- Relate multiples and factors.
- Identify prime and composite numbers.
- Solve word problems using models.
- Generate and analyze patterns.

Solve multiplication and division problems using strategies.

- repeatedly double to multiply numbers by four and eight
- manipulate area models created on graph paper to double and halve multiplication facts
- extend tens facts with base ten blocks

Relate multiples and factors.

- use number charts to find multiples
- identify patterns found on number charts
- generate multiples of numbers using multiplication strategies or a calculator
- use arrays to identify factors of a number
- use square tiles to find factor pairs for a given number

Identify prime and composite numbers.

- color multiples on a hundred chart to identify prime and composite numbers
- color arrays on grid paper to identify prime and composite numbers

Solve word problems using models.

- solve comparison problems using a tape diagram
- represent comparison situations using counters
- represent comparison situations using folded paper strips

Generate and analyze patterns.

- generate and extend patterns that follow a given rule
- identify relationships in growing patterns
- use multiples to analyze shape patterns
- solve word problems

Assessments

- Pretest
- Formative: Written Test
- Observations
- Formative: Other oral assessments
- Portfolio
- Formative: Student Portfolio
- Check Ups
- Summative: Written Test
- Performance Tasks
- Summative: Other written assessments
- Interview
- Summative: Other oral assessments
- [M1 Check-up2.pdf](#)

Resources

Professional & Student
Professional and Student

Student Resources

Stepping Stones Student Journal

Stepping Stones Number Case

Stepping Stones Fundamentals Games: Have a Half, Half of That, Remainder Run, Doing Division, Division Dash, Divide It, Nice and Easy, Nice and Easy Too, Factor Find, Perfect Pairs, Friendly Factors

[M2 Check-up 2.pdf](#)
[M5 Check-up 1.pdf](#)
[M5 Check-up2.pdf](#)
[M5 Performance tasks.pdf](#)
[M6 Check-up 1.pdf](#)
[M7 Check-up 1.pdf](#)
[M8 Check-up 1.pdf](#)
[M9 Check-up 1.pdf](#)
[M11 Check-up 1.pdf](#)
[M11 Performance tasks.pdf](#)
[M12 Check-up 1.pdf](#)
[M8 Performance tasks.pdf](#)

Stepping Stones Pretest, Check-ups, and Performance Tasks are found in the assessment tab of each module

District approved websites and apps as needed

Professional Resources

Stepping Stones Online Resources
Stepping Stones Math Ed Videos (within each module, select mathematics, then focus for available videos including some model lessons):

Module 1, Module 2, Module 3, Module 11:

- BMMS Using Mental Strategies to Multiply

Module 5:

- DCM1 Exploring the Comparison Model of Multiplication

Student Learning Expectation & 21st Century Skills

[Information Literacy](#)
[Critical Thinking](#)
[Spoken Communication](#)
[Written Performance](#)

Interdisciplinary Connections

Stepping Stones: (More math ---> Cross-curricula links)

- Word Search (Module 1,6,8,11) language and the arts
- Creating a Human Abacus (Module 1) sports and recreation
- Multiplication Art (Module 1) music and the arts
- How I Do It (Module 2) language and the arts
- Number Movers (Module 2) sports and recreation
- Comparing Technologies (Module 2) technology
- Writing Word Problems (Modules 3,5,7) language and the arts
- Division Game (Module 8) language and the arts
- Painting Partial Quotients (Module 8) music and the arts
- Beat the Calculator (Module 11) technology
- Using Spreadsheets (Module 12) financial literacy



Atlas Version 9.5

© 2019 [Faria Education Group Ltd.](#) All rights reserved. [Privacy Policy](#)



Unit Planner: Measurement and Data

Math Grade 4

Thursday, December 19, 2019, 3:57 PM

District Elementary > 2019-2020 > Grade 4 > Mathematics > Math Grade 4 > Week 8 - Week 36

Last Updated: Today by Kristine Feda

Measurement and Data

Bracksieck, Jill; Connors, Jenna; Feda, Kristine; Hiruo, Amy; Pierce, Chrissie

- [Unit Planner](#)
- [Lesson Planner](#)

Concept-Based Unit Development Graphic Organizer (Download)

Unit Web Template (Optional)

Concepts / Conceptual Lens

Please attach your completed Unit Web Template here
Process and Communication

Generalizations / Enduring Understandings

Strand 1: Area and Perimeter

Generalizations

Square units measure area.
Linear units measure perimeter.

Concepts

- measurement
- area
- perimeter

Strand 2: Conversion of Units

Generalization

Larger units consist of smaller units.
Units can be converted within a system.

Concepts

- system
- conversion
- scale

Guiding Questions

Please identify the type of question: (F) Factual, (C) Conceptual, (P) Provocative [Debatable]

Factual:

What is area?
What is perimeter?
What formula can be used to find perimeter/area?
What is mass?
What is volume?

Conceptual:

How are area and perimeter related?
How are the units used to measure perimeter alike/different from the units used to measure area?
How are units in the same system of measurement related?
Is it necessary to be able to convert between units of measure?

Provocative:

Is one system of measure better than the other?
What would the world be like without standard units of measurement?

Standard(s)

Connecticut Core Standards / Content Standards

CCSS: Mathematics

CCSS: Grade 4

Measurement & Data

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

4.MD.A.1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

4.MD.A.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

4.MD.A.3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

Mathematical Practice

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Objective(s)

Bloom/ Anderson Taxonomy / DOK Language

- Calculate the area of rectangles
- Calculate the perimeter of rectangles
- Solve word problems involving area and perimeter
- Use customary and metric units to measure length, mass, and capacity (liquid volume)
- Convert between metric units of length (kilometers, meters, centimeters, millimeters)
- Convert between customary units of length (miles, yards, feet, inches)
- Convert between metric units of capacity/liquid volume (liters, milliliters)
- Convert between customary units of capacity/liquid volume (gallons, quarts, pints, cups, fluid ounces)
- Convert between metric units of mass (kilograms, grams)
- Convert between customary units of mass (pounds, ounces)
- Convert between hours, minutes, and seconds
- Solve word problems involving length and measurement

Critical Content & Skills

What students must **KNOW** and be able to **DO**

- Calculate the area and perimeter of rectangles.
- Solve word problems involving measurement.
- Measure length, mass, capacity (liquid volume), and time.
- Convert units of measurement.

Core Learning Activities

Calculate the area and perimeter of rectangles.
Solve word problems.

- use grid paper to develop a rule to calculate the area and perimeter of rectangles
- use centimeter connecting cubes to build arrays
- use formulas to calculate area and perimeter of rectangles

Measure length, mass, and capacity (liquid volume).
Solve word problems.

- relate measurement units to real world items
- use base ten blocks to estimate length
- use rulers, yardsticks, and meter sticks
- use a pan balance to measure mass
- use measuring cups and graduated cylinders to measure capacity (liquid volume)

Convert units of measurement.
Solve word problems.

- explore relationships and convert between standard units of measure for length, weight, and capacity (liquid volume)
- explore relationships and convert between metric units of measurement of mass, length, and capacity (liquid volume)
- explore relationships and convert between hours, minutes and seconds

Assessments

Pretest

Formative: Written Test

Observations

Formative: Other oral assessments

Portfolio

Formative: Student Portfolio

Check Ups

Summative: Written Test

Performance Tasks

Summative: Other written assessments

Interview

Summative: Other oral assessments

[M3 Check-up 2.pdf](#)

[M5 Check-up2.pdf](#)

[M6 Check-up 1.pdf](#)

[M6 Check-up 2.pdf](#)

[M9 Check-up 1.pdf](#)

[M9 Check-up 2.pdf](#)

[M12 Check-up 2.pdf](#)

[M12 Performance tasks.pdf](#)

Resources

Professional & Student

Professional and Student

Student Resources

Stepping Stones Student Journal

Stepping Stones Number Case

Stepping Stones Pretest, Check-ups, and Performance Tasks are found in the assessment tab of each module

District approved websites and apps as needed

Professional Resources

Stepping Stones Online Resources

Stepping Stones Math Ed Videos (within each module, select mathematics, then focus for available videos including some model lessons):

Module 3:

	<ul style="list-style-type: none"> • BMMS Using Mental Strategies to Multiply <p>Module 5:</p> <ul style="list-style-type: none"> • DCM1 Exploring the Comparison Model of Multiplication •
<p>Student Learning Expectation & 21st Century Skills</p> <p><u>Information Literacy</u></p> <p><u>Critical Thinking</u></p> <p><u>Spoken Communication</u></p> <p><u>Written Performance</u></p>	<p>Interdisciplinary Connections</p> <p><u>Stepping Stones: (More math ---> Cross-curricula links)</u></p> <ul style="list-style-type: none"> • Writing Word Problems involving area and perimeter (Module 3): language arts and literature • The Roman Pace (Module 5): social studies • The Long Jump (Module 5): sports and recreation • Word Search (Module 6): language arts and literature • Writing Word Problems involving capacity and mass (Module 9): language arts and literature • History of the Liquid Volume Units (Module 9): social studies • Rodeo Time (Module 12): language arts and literature • Making a Purchase (Module 12): sports and recreation • Using Spreadsheets (Module 12): financial literacy





Unit Planner: Fractions Math Grade 4

Copyright © District of Columbia Public Schools 2019

District Elementary > 2019-2020 > Grade 4 > Mathematics > Math Grade 4 > Week 13 - Week 38

Last Updated: Today by Kristine Feda

Fractions

Bracksieck, Jill; Connors, Jenna; Feda, Kristine; Hiruo, Amy; Pierce, Chrissie

- [Unit Planner](#)
- [Lesson Planner](#)

Concept-Based Unit Development Graphic Organizer (Download)

Unit Web Template (Optional)

Concepts / Conceptual Lens

Please attach your completed Unit Web Template here
Relationships

Generalizations / Enduring Understandings

Strand 1: Fraction Equivalence and Ordering **Generalization**

Fractions can be compared using numerators and/or denominators.

Concepts

- common denominator
- common numerator
- equivalence
- ordering
- comparison

Strand 2: Addition, Subtraction and Multiplication of Fractions **Generalization**

Whole number operations relate to fractions.

Concepts

- mixed number
- whole number
- fraction
- decomposition
- area model
- number line model

Strand 4: Decimal Fractions

Generalization

Decimal notation expresses fractions.
Decimal fractions can be compared using place value.

Concepts

Guiding Questions

Please identify the type of question: (F) Factual, (C) Conceptual, (P) Provocative [Debatable]

Factual:

- What is a decimal fraction?
- How are equivalent fractions identified?
- What does a fraction represent?

Conceptual:

- What is the relationship between equivalent fractions?
- What does a fraction represent in a number?
- How are common fractions, mixed numbers and decimals similar and different?
- How does money correlate to decimal fractions?
- Why is the decimal point important?
- How does changing the size of the whole effect the size of a fraction?
- What is the relationship between fractions with different denominators/numerators?
- How can models be used to compute fractions with like and unlike denominators?

Provocative:

- Is it important to compare fractions? Why? Why not?
- Are decimals and fractions useful for the same reasons?

- decimal
- place value
- comparison

Standard(s)

Connecticut Core Standards / Content Standards

CCSS: Mathematics

CCSS: Grade 4

Number & Operations—Fractions

4.NF.A. Extend understanding of fraction equivalence and ordering.

4.NF.A.1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

4.NF.A.2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or

4.NF.B. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

4.NF.B.3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

4.NF.B.3a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

4.NF.B.3b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.

4.NF.B.3c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

4.NF.B.3d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

4.NF.B.4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

4.NF.B.4a. Understand a fraction a/b as a multiple of $1/b$.

4.NF.B.4b. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.

4.NF.B.4c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

4.NF.C. Understand decimal notation for fractions, and compare decimal fractions.

4.NF.C.5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.

4.NF.C.6. Use decimal notation for fractions with denominators 10 or 100

4.NF.C.7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$.

Measurement & Data

4.MD.B. Represent and interpret data.

4.MD.B.4. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

Mathematical Practice

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

© Copyright 2010. National Governors Association Center for Best Practices and Council of Chief State School Officers. All rights reserved.

Objective(s)

Bloom/ Anderson Taxonomy / DOK Language

Fraction equivalence and ordering

- Identify equivalent mixed numbers and common fractions
- Compare mixed numbers and common fractions
- Compare fractions with the same numerator or same denominator (number line model)
- Identify equivalent fractions and common multiples
- Compare fractions with related and unrelated denominators

Addition and subtraction of fractions

- Add and subtract fractions for totals less than and greater than one
- Decompose fractions
- Add and subtract mixed numbers (with and without composing/decomposing)
- Compose mixed numbers
- Write and solve mixed number and common fraction word problems
- Represent fractions, whole numbers as fractions and mixed numbers

Multiplication of fractions

- Multiply fractions less than one by a whole number
- Identify a non-unit fraction as a multiple of a unit fraction
- Multiply mixed numbers by a whole number

Decimal fractions

- Represent tenths and hundredths as a decimal fraction (area model, number line model)
- Relate fractions, mixed numbers, and decimal fractions
- Compare and order decimal fractions to tenths and hundredths
- Add tenths to tenths and hundredths to hundredths with and without composing
- Solve decimal fractions and money word problems

Critical Content & Skills

*What students must **KNOW** and be able to **DO***

- **Order, compare and find the equivalence of fractions, mixed numbers and decimal fractions.**
- **Add and subtract fractions, mixed numbers and decimal fractions.**
- **Multiply fractions and mixed numbers.**
- **Solve word problems that include fractions, mixed numbers and decimal fractions (money).**

Core Learning Activities

Order, compare and find the equivalence of fractions, mixed numbers and decimal fractions.

- create and use fraction strips (length models to find and write equivalent fractions)
- decompose mixed numbers into different combinations of fractions
- use a number line to identify equivalent improper fractions and mixed numbers
- use a number line to compare and then order fractions
- use pattern blocks, fraction strips, fraction wall, fraction stacks and circles, to compare fractions
- use area models to calculate equivalent fractions
- use common multiples to convert fractions to the same denominator and then compare
- use a number expander to write ones, tenths, and hundredths as decimal fractions
- use the area model to represent whole amounts and tenth, hundredths
- use a number line and symbols to compare and order decimal fractions

Add and subtract fractions, mixed numbers and decimal fractions.

- add fractions and represent the sum as a mixed number
- use area models and number line models to represent the addition of fractions
- when adding mixed numbers add the whole numbers and fractions separately
- use a number line to subtract fractions with a

common denominator

- decompose whole numbers into equivalent fractions to subtract mixed numbers
- add numbers to include tenths and hundredths
- add decimal fractions to align tenths and hundredths

Multiply fractions and mixed numbers.

- use an area model to multiply fractions, whole numbers and mixed numbers
- use a number line model to multiply unit fractions
- use partial product method to multiply whole numbers and mixed numbers

Solve word problems that include fractions, mixed numbers and decimal fractions (money).

- draw diagrams to model word problems
- use money to model addition or decimal fractions

Assessments

Pretest

Formative: Written Test

Observations

Formative: Other oral assessments

Portfolio

Formative: Student Portfolio

Check Ups

Summative: Written Test

Performance Tasks

Summative: Other written assessments

Interview

Summative: Other oral assessments

[M4 Check-up 2.pdf](#)

[M7 Check-up 1.pdf](#)

[M7 Check-up 2.pdf](#)

[M7 Performance tasks.pdf](#)

[M8 Check-up 1.pdf](#)

[M8 Check-up 2.pdf](#)

[M9 Check-up 1.pdf](#)

[M9 Performance tasks.pdf](#)

[M10 Check-up 1.pdf](#)

[M10 Check-up 2.pdf](#)

[M10 Performance tasks.pdf](#)

Resources

Professional & Student

Professional and Student

Student Resources

Stepping Stones Student Journal

Stepping Stones Number Case

Stepping Stones Fundamentals Games: Target 10, Near Tenths, First to Two

Stepping Stones Pretest, Check-ups, and Performance Tasks are found in the assessment tab of each module

District approved websites and apps as needed

Professional Resources

Stepping Stones Online Resources

Stepping Stones Math Ed Videos (within each module, select mathematics, then focus for available videos including some model lessons)

Module 4:

- DRF 1 Interpreting Fractions: Part 1
- DFM 1 An Introduction to Fraction Models
- DEF 1 An Introduction to Equivalent Fractions
- DEF 2 Teaching Equivalent Fractions

Module 7:

- DAF 1 Adding and Subtracting Common

- Fractions: Same Denominators
- DAF 4 Adding Mixed Numbers Same Denominators
 - DAF 5 Subtracting Mixed Numbers Same Denominators

Module 8:

- DMF 1 An Introduction to Multiplying Common Fractions
- DMF 2 Multiplying Whole Numbers and Proper Fractions
- DMF 4 Multiplying Mixed Numbers

Module 9:

- DCF 1 Comparing Common Fractions

Student Learning Expectation & 21st Century Skills

- Information Literacy
- Critical Thinking
- Spoken Communication
- Written Performance

Interdisciplinary Connections

Stepping Stones: (More math ---> Cross-curricula links)

- Number Movers (Module 4 and 10): sports and recreation activity
- Make it A Game (Module 4): technology
- Writing Word Problems (Module 7): language arts and literature
- Mixed Number Artwork (Module 7): music and the arts
- Word Search (Module 8): language arts and literature
- Make it A Game (Module 9): technology
- History of the Decimal Point (Module 10): social studies
- Decimal Fraction Art (Module 10): music and the arts





Unit Planner: Geometry

Math Grade 4

Thursday, December 14, 2017 8:20 AM

District Elementary > 2019-2020 > Grade 4 > Mathematics > Math Grade 4 > Week 18 - Week 38

Last Updated: Today by Jill Bracksieck

Geometry

Bracksieck, Jill; Connors, Jenna; Feda, Kristine; Hiruo, Amy; Pierce, Chrissie

- [Unit Planner](#)
- [Lesson Planner](#)

Concept-Based Unit Development Graphic Organizer (Download)

Unit Web Template (Optional)

Concepts / Conceptual Lens

Please attach your completed Unit Web Template here
Structure and Spatial Relationships

Generalizations / Enduring Understandings

Strand 1: Angle Measurement

Generalizations

Lines intersect to create angles.
Angles measure fraction of a circle.
Addition and subtraction can be applied to angles.

Concepts

- line segments
- rays
- points
- measurement
- degree
- intersect
- angles

Strand 2: Classify Shapes, Lines, and Angles

Generalization

Attributes classify shapes, lines, and angles.

Concepts

- right angle
- acute angle
- obtuse angle
- symmetry
- perpendicular
- parallel
- attribute
- sides

Guiding Questions

Please identify the type of question: (F) Factual, (C) Conceptual, (P) Provocative [Debatable]

Factual:

What is symmetry?
What are the attributes of quadrilaterals?
What are the attributes of a right triangle?
How can points, lines and line segments be drawn?
How can rays and angles be drawn and identified?
How can parallel and perpendicular lines be drawn and identified?

Conceptual:

How are quadrilaterals alike and different?
How can shapes be classified by their angles and sides?
How are angles and circles related?

Provocative:

Where is geometry found in the everyday world?
Where are angles found in the everyday world?
Is it important to measure angles? Why or why not?
Is it important to classify shapes? Why or why not?
Are some shapes more useful in everyday world? What shape is the most useful?

Standard(s)

Connecticut Core Standards / Content Standards

CCSS: Mathematics

CCSS: Grade 4

Measurement & Data

4.MD.C. Geometric measurement: understand concepts of angle and measure angles.

4.MD.C.5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

4.MD.C.5a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a "one-degree angle," and can be used to measure angles.

4.MD.C.5b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

4.MD.C.6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

4.MD.C.7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry

4.G.A. Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

4.G.A.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

4.G.A.2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

4.G.A.3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Mathematical Practice

MP.The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

MP.1. Make sense of problems and persevere in solving them.

MP.2. Reason abstractly and quantitatively.

MP.3. Construct viable arguments and critique the reasoning of others.

MP.4. Model with mathematics.

MP.5. Use appropriate tools strategically.

MP.6. Attend to precision.

MP.7. Look for and make use of structure.

MP.8. Look for and express regularity in repeated reasoning.

Objective(s)

Bloom/ Anderson Taxonomy / DOK Language

- Identify angles as fractions of a full turn
- Use a protractor to measure angles
- Calculate unknown angles
- Draw angles
- Identify acute, obtuse and right angles
- Identify triangles as acute, obtuse or right
- Identify and draw points, lines, line segments and rays
- Identify and draw perpendicular and parallel lines in two-dimensional shapes
- Identify lines of symmetry in two-dimensional shapes
- Classify two-dimensional shapes based on attributes

Critical Content & Skills

*What students must **KNOW and be able to DO***

- Understand concepts of angles.
- Measure angles.
- Identify and draw lines and angles.
- Classify two-dimensional shapes by attributes of their lines, angles and symmetry.

Core Learning Activities

Understand concepts of angles

- use a circle to identify angles as fractions of a full turn (arc)

Measure angles

- use a protractor to measure angles
- calculate unknown angles

Identify and draw lines and angles

- draw angles
- identify acute, right, and obtuse angles and triangles
- identify and draw points, lines, line segments, and rays

Classify 2-dimensional shapes by attributes of their lines, angles and symmetry

- identify and draw parallel and perpendicular lines in two-dimensional shapes
- draw reflections of two-dimensional shapes
- draw and identify lines of symmetry in two-dimensional shapes

Assessments

Pretest
Formative: Written Test
Observations
Formative: Other oral assessments
Portfolio
Formative: Student Portfolio
Check Ups
Summative: Written Test
Performance Tasks
Summative: Other written assessments

Resources

Professional & Student
Professional and Student

Student Resources

Stepping Stones Student Journal

Stepping Stones Number Case

Stepping Stones Fundamentals Games: Angle Chase

Interviews

Summative: Other oral assessments

[M6 Check-up 2.pdf](#)

[M6 Performance tasks.pdf](#)

[M7 Check-up 2.pdf](#)

[M11 Check-up 2.pdf](#)

(Module 6.11)

Stepping Stones Pretest, Check-ups, and Performance Tasks are found in the assessment tab of each module

District approved websites and apps as needed

Professional Resources

Stepping Stones Online Resources

Student Learning Expectation & 21st Century Skills

[Information Literacy](#)

[Critical Thinking](#)

[Spoken Communication](#)

[Written Performance](#)

Interdisciplinary Connections

Stepping Stones: (More math ---> Cross-curricula links)

- Reflection of Light (Module 6): science
- Word Search (Module 6): language arts and literature
- Name Posters (Module 6): music and the arts
- Snowflakes (Module 11): music and the arts



Elementary 6-Day Schedule:

Rationale

- Must have a balance and equity between and among teachers and disciplines (e.g., academics, the arts, etc.).
- Music teachers are not fully scheduled. This is no fault of the teachers, but it needs to be resolved so that equity exists. This was the rationale for the shared art. Shared services in this area are not new and have existed in the past.
- Flexibility of schedule in a 6-day allows for inclusion of academics, the arts, and other areas such as Spanish.
- Need to ensure adequate time for science instruction (note: if we are spending tax dollars to include resources, texts, professional development for science instruction, then it needs to be given appropriate instructional time in the schedule).
- Need to legitimize Spanish at the elementary level (own space in schedule).
- Schedule will be common across all elementary schools and Reed.
- Will mitigate ongoing losses to instruction for holidays, snow days, etc.

Loss of actual instructional time in Art and Music in the proposed 6-day

- Additional classes (4 for art and 4 for music) will be included in the new schedule to mitigate the loss of instructional time.
- The 6-day schedule will actually support instructional time often lost to holidays and snow days.

Loss of instruction for other areas (PE and Library)

- While some areas, such as PE and library, will also lose some time – all areas on the rotation will gain back time that they continue to lose every year in a 5-day calendar (ex: Monday holidays, snow days) schedule under the new 6-day.
- Mondays alone have already accounted for 4 days lost.
- Regarding PE - movement and physical activity is important to us, but this should, and does, happen throughout the day. Students receive 30 minutes of recess every day, and students will be participating in Mindfulness exercises as appropriate, field days, and other worthy events that inspire health and wellness.
- In addition to supporting a variety of literacy activities as well as makerspaces, our Library Media Specialists will be “pushing into” instruction within classrooms, specifically supporting classroom teachers’ integration of technology standards into literacy and other content areas.

Decline in quality of programs (art and music) due to shared staff

- Level of quality in any program with regular schedules and prep time (especially in areas where more prep time is evident), should not result in lower standards
- The commitment to concerts and art shows – regardless if you are in two buildings – should remain. We have already been clear that travel between buildings on a given day is not part of this change. Teachers will not travel to two buildings on any given day.
- In fact, it was made clear by the elementary administrative team that a priority was to maintain their own music teachers as much as possible in their current buildings and that no teacher would travel within a day. This would alleviate any presumed level of stress.
- A previous discussion between the Superintendent and Director of Fine Arts focused on the possibility of a district-wide art show (similar to other districts), which is a unifying event for the entire community. Parents and others could volunteer to support this as a district-wide event.
- Quality of art (or music) is not an outcome of shared services. This requires ongoing oversight of instructional practices and the revision of curriculum. This is now a priority (in art) as it has come up in parent and administrator conversations recently.

CSDE Recommendations for Art and Music Instruction

- Connecticut State Department of Ed has not established specific recommendations on instructional time in Art and Music. Instead, they refer districts to guidelines set forth by National Associations in these fields.
- The National Association for Music Educators (NAME) provides guidance for school districts on creating the conditions so that students are able to achieve the core music standards. They do suggest 90 minutes of general music time for all students K-8. However, the Association also states that the most important criterion for measuring the effectiveness of a school music program is the extent to which the students meet the standards, not the amount of time of instruction.
- Given that our students at Reed have 120 minutes of music instruction in a 6-day cycle, not in a general music program but in chorus, orchestra and band, it can be concluded that our students are more than meeting the standards for music.
- The National Art Education Association (NAEA) guidelines suggest that students have one art class per week with art educators teaching no more than six classes per day of art classes lasting 50 minutes. These criteria are “advisory recommendations meant to provide guidance for schools and school districts including

superintendents and school board members in their collective efforts to provide comprehensive visual art education for all students.”

- Both organizations recommend one music educator is available for every 400 students.
- If you go to the CSDE website, you will find links to these organizations’ positions statements located there.

Suggestions for current year purchase to reduce 2020-2021 Budget

<u>Cost Center</u>	<u>Object</u>	<u>#</u>	<u>Description</u>	<u>Budgeted</u>
HS Music	Equipment	1	Concert Tuba	\$7,700
Sports	Equipment	1	Lacrosse Goals	\$1,850
Curriculum	Textbooks		Stepping Stones	\$28,000
Curriculum	Textbooks		Envision	\$14,000
Plant	Equipment	1	MS Ride-on Floor Scrubber	\$15,000
Plant	Equipment	1	MG Ride-on Floor Scrubber	\$15,000
Plant	Equipment	1	HAW Walk-behind Floor Scrubber	\$7,500
Plant - MS	Furniture		NMS Maker Space	\$8,160
Total				\$97,210

Proposed Operational Plan for 2020-21

		Cumulative	Percent		Percent	Final \$	
	2019-20 Approved Budget	Adjustment	of Decrease or Increase	Balance	Change	Increase	
	78,104,410						
	2020-21 Superintendent's Proposed Plan	1,177,364			1.51%		
<u>BOE Adjustments to Superintendent's Plan 2/4/20</u>							
<u>Technical Adjustments</u>							
1	General Services - Liability Insurance	(7,506)	(7,506)	-0.01%	79,274,268	1.50%	1,169,858
2	Plant Operations - Property Insurance	(4,064)	(11,570)	-0.01%	79,270,204	1.49%	1,165,794
3	Transportation - Out of District	(20,000)	(31,570)	-0.04%	79,250,204	1.47%	1,145,794
4	National Superintendent's Roundtable	(2,495)	(34,065)	-0.04%	79,247,709	1.46%	1,143,299
5			(34,065)	-0.04%	79,247,709	1.46%	1,143,299
6			(34,065)	-0.04%	79,247,709	1.46%	1,143,299
<u>BOE Adjustments 2/4/20</u>							
1	Spec Ed Sail Program at the MS - teacher	61,961	27,896	0.04%	79,309,670	1.54%	1,205,260
2	Health & Wellness teacher, less grant for \$35,000	29,316	57,212	0.07%	79,338,986	1.58%	1,234,576
3	Bounce Back trauma awareness training for staff	2,500	59,712	0.08%	79,341,486	1.58%	1,237,076
4	Diversity Program for students	7,500	67,212	0.09%	79,348,986	1.59%	1,244,576
5			67,212	0.09%	79,348,986	1.59%	1,244,576
6			67,212	0.09%	79,348,986	1.59%	1,244,576
7			67,212	0.09%	79,348,986	1.59%	1,244,576
8			67,212	0.09%	79,348,986	1.59%	1,244,576
9			67,212	0.09%	79,348,986	1.59%	1,244,576
10			67,212	0.09%	79,348,986	1.59%	1,244,576
BOARD OF EDUCATION'S CURRENT PROPOSED BUDGET			67,212	0.09%	79,348,986	1.59%	1,244,576
Total Adjustments			67,212				
Percent Reduction				0.09%			
Proposed BOE Current Budget					79,348,986		
Proposed Budget % Increase						1.59%	
Proposed Budget \$ Increase							1,244,576

Proposed Operational Plan for 2020-21

		Cumulative	Percent		Percent	Final \$
	2019-20 Approved Budget	Adjustment	of Decrease	Balance	Change	Increase
	78,104,410		or Increase			
2020-21 Superintendent's Proposed Plan	79,281,774	1,177,364			1.51%	
<u>BOE Adjustments to Superintendent's Plan 2/4/20</u>						
<u>Technical Adjustments</u>						
1	General Services - Liability Insurance	(7,506)	(7,506)	-0.01%	79,274,268	1,169,858
2	Plant Operations - Property Insurance	(4,064)	(11,570)	-0.01%	79,270,204	1,165,794
3	Transportation - Out of District	(20,000)	(31,570)	-0.04%	79,250,204	1,145,794
4	National Superintendent's Roundtable	(2,495)	(34,065)	-0.04%	79,247,709	1,143,299
			(34,065)	-0.04%	79,247,709	1,143,299
			(34,065)	-0.04%	79,247,709	1,143,299
<u>BOE Adjustments 2/4/20</u>						
1	Spec Ed Sail Program at the MS - teacher	61,961	27,896	0.04%	79,309,670	1,205,260
2	Health & Wellness teacher, less grant for \$35,000	29,316	57,212	0.07%	79,338,986	1,234,576
3	Bounce Back trauma awareness training for staff	2,500	59,712	0.08%	79,341,486	1,237,076
4	Diversity Program for students	7,500	67,212	0.09%	79,348,986	1,244,576
5	Equipment per list	(97,210)	(29,998)	-0.04%	79,251,776	1,147,366
6	Allowance from turnover	(50,000)	(79,998)	-0.10%	79,201,776	1,097,366
7			(79,998)	-0.10%	79,201,776	1,097,366
8			(79,998)	-0.10%	79,201,776	1,097,366
9			(79,998)	-0.10%	79,201,776	1,097,366
10			(79,998)	-0.10%	79,201,776	1,097,366
BOARD OF EDUCATION'S CURRENT PROPOSED BUDGET			(79,998)	-0.10%	79,201,776	1,097,366
Total Adjustments			(79,998)			
Percent Reduction				-0.10%		
Proposed BOE Current Budget					79,201,776	
Proposed Budget % Increase						1.40%
Proposed Budget \$ Increase						1,097,366
			101,277			

Routes Currently Being Utilized

Location	Current rates	# days	aide		Year 1		Year 2		Year 3		Year 4		Year 5	
			hours	# runs	EdAdvance		EdAdvance		EdAdvance		EdAdvance		EdAdvance	
					\$ per run	\$ per location	\$ per run	\$ per location	\$ per run	\$ per location	\$ per run	\$ per location	\$ per run	\$ per location
ACES - North Haven	\$ 170.63	208	10	2	168.50/150.00	\$ 105,976.00	171.10/153.00	\$ 108,060.16	172.17/155.20	\$ 110,622.72	174.75/157.65	\$ 115,336.00	177.37/159.98	\$ 116,376.00
ACES - Northford	\$ 170.63	208	10.5	1	177.95	\$ 74,687.60	180.61	\$ 76,332.88	183.32	\$ 79,080.56	186.07	\$ 83,474.56	188.86	\$ 85,146.88
CES - Trumbull	\$ 182.00	203	4.5	1	177.95	\$ 51,881.73	180.61	\$ 52,878.46	183.32	\$ 54,342.09	186.07	\$ 56,498.96	188.86	\$ 57,522.08
CES (separate vehicle required) T	\$ 182.00	203		1	174.20	\$ 35,362.60	176.81	\$ 35,892.43	179.46	\$ 36,430.38	182.15	\$ 36,976.45	184.88	\$ 37,530.64
Milestone - Orange	\$ 175.00	204	4.75	1	168.50	\$ 51,089.25	171.10	\$ 52,104.15	172.17	\$ 53,291.43	174.75	\$ 55,513.50	177.37	\$ 56,532.48
Milestone - Milford	\$ 183.00	217	5	1	178.00	\$ 57,342.25	180.68	\$ 58,466.31	183.34	\$ 60,128.53	186.14	\$ 62,634.88	188.93	\$ 63,782.81
Hope Academy - Orange	\$ 185.10	206		1	164.40/150.00	\$ 33,866.40	166.86/153.00	\$ 34,373.16	169.36/155.30	\$ 34,888.16	171.90/158.40	\$ 35,411.40	174.48/160.77	\$ 35,942.88
Foundation (upper) - Milford	\$ 169.50	204		1	168.50	\$ 34,374.00	171.10	\$ 34,904.40	172.17	\$ 35,122.68	174.25	\$ 35,547.00	177.37	\$ 36,183.48
Giant Steps - Fairfield	\$ 210.00	207	4.5	1	189.50	\$ 55,294.88	192.34	\$ 56,348.51	195.23	\$ 57,878.24	198.16	\$ 60,114.87	201.13	\$ 61,195.41
IPPI Learning Academy - Stratfor	\$ 182.00	205		1	177.95	\$ 36,479.75	186.60	\$ 38,253.00	183.32	\$ 37,580.60	186.07	\$ 38,144.35	188.86	\$ 38,716.30
Meloria - Meriden	\$ 187.25	222	5.25	1	185.50	\$ 61,285.88	188.28	\$ 62,485.79	191.10	\$ 64,277.33	193.27	\$ 66,798.69	196.88	\$ 68,182.86
Learning Center (Adlebrook) 2 ru	\$ 194.50	214	12	2	194.50	\$ 127,544.00	197.42	\$ 130,077.76	200.38	\$ 133,912.64	203.38	\$ 139,690.64	206.43	\$ 142,280.04
TSA / Speech Academy - Easton	\$ 182.50	205	4.75	1	180.25	\$ 53,748.44	182.95	\$ 54,788.81	185.69	\$ 56,324.26	188.47	\$ 58,598.23	191.30	\$ 59,665.25
Gengras Center - West Hartford		0			168.20	\$ -	170.72	\$ -	173.28	\$ -	175.87	\$ -	178.5	\$ -
Arch Bridge - Bethlehem	\$ 165.00	212		1	166.00	\$ 35,192.00	168.49	\$ 35,719.88	171.01	\$ 36,254.12	173.57	\$ 36,796.84	176.17	\$ 37,348.04
ACCESS - Danbury 3 runs (\$148	\$ 148.00	202		3	148.00	\$ 89,688.00	150.22	\$ 91,033.32	152.47	\$ 92,396.82	154.75	\$ 93,778.50	157.07	\$ 95,184.42
Ben Bronze Academy - West Hart	\$ 170.00	180		1	176.40	\$ 31,752.00	179.04	\$ 32,227.20	181.73	\$ 32,711.40	184.46	\$ 33,202.80	187.23	\$ 33,701.40
Northwest Village/Wheeler Clinic	\$ 150.00	205		1	152.00	\$ 31,160.00	154.28	\$ 31,627.40	156.59	\$ 32,100.95	158.93	\$ 32,580.65	161.31	\$ 33,068.55
Solterra Academy - New Britain (\$ 125.00	206	6	1	158.00	\$ 53,869.00	160.37	\$ 54,975.22	162.78	\$ 56,707.68	165.22	\$ 59,373.32	167.69	\$ 60,500.14
Aide Daily Rate	\$ 16.60				17.25		17.75		18.75		20.50		21	
Annual Increase					\$ 1,020,593.76	0.31%	\$ 1,040,548.83	1.96%	\$ 1,064,050.58	2.26%	\$ 1,100,471.64	3.42%	\$ 1,118,859.66	1.67%

Cumulative Total	\$ 5,344,524.46
Cumulative Increase	9.62%
Average Increase per Year	1.92%

Location	Current rates	# days	aide hr:	# runs	Year 1		Year 2		Year 3		Year 4		Year 5	
					EASTCONN		EASTCONN		EASTCONN		EASTCONN		EASTCONN	
					\$ per run	\$ per location	\$ per run	\$ per location	\$ per run	\$ per location	\$ per run	\$ per location	\$ per run	\$ per location
ACES - North Haven	\$ 170.63	208	10	2	150.00	\$ 101,920.00	153.75	\$ 106,600.00	157.59	\$ 111,400.64	161.53	\$ 116,326.08	165.57	\$ 121,376.32
ACES - Northford	\$ 170.63	208	10.5	1	150.00	\$ 72,696.00	153.75	\$ 76,752.00	157.59	\$ 80,914.08	161.53	\$ 85,184.32	165.57	\$ 89,562.72
CES - Trumbull	\$ 182.00	203	4.5		140.00	\$ 45,776.50	143.50	\$ 47,857.25	147.09	\$ 49,992.81	150.77	\$ 52,183.18	154.54	\$ 54,428.36
CES (separate vehicle required) T	\$ 182.00	203		0	140.00	\$ 28,420.00	143.50	\$ 29,130.50	147.09	\$ 29,859.27	150.77	\$ 30,606.31	154.54	\$ 31,371.62
Milestone - Orange	\$ 175.00	204	4.75		160.00	\$ 51,051.00	164.00	\$ 53,320.50	168.10	\$ 55,649.16	172.30	\$ 58,036.98	176.61	\$ 60,486.00
Milestone - Milford	\$ 183.00	217	5		160.00	\$ 55,335.00	164.00	\$ 57,830.50	168.10	\$ 60,391.10	172.30	\$ 63,016.80	176.61	\$ 65,709.77
Hope Academy - Orange	\$ 185.10	206		0	160.00	\$ 32,960.00	164.00	\$ 33,784.00	168.10	\$ 34,628.60	172.30	\$ 35,493.80	176.61	\$ 36,381.66
Foundation (upper) - Milford	\$ 169.50	204		0	160.00	\$ 32,640.00	164.00	\$ 33,456.00	168.10	\$ 34,292.40	172.30	\$ 35,149.20	176.61	\$ 36,028.44
Giant Steps - Fairfield	\$ 210.00	207	4.5		160.00	\$ 50,818.50	164.00	\$ 53,043.75	168.10	\$ 55,326.96	172.30	\$ 57,668.13	176.61	\$ 60,069.33
IPPI Learning Academy - Stratfor	\$ 182.00	205		0	160.00	\$ 32,800.00	164.00	\$ 33,620.00	168.10	\$ 34,460.50	172.30	\$ 35,321.50	176.61	\$ 36,205.05
Meloria - Meriden	\$ 187.75	222	5.25		190.00	\$ 64,324.50	194.75	\$ 67,127.25	199.62	\$ 70,003.26	204.61	\$ 72,952.53	209.73	\$ 75,977.28
The Learning Center (Adlebrook)	\$ 194.50	214	12	2	180.00	\$ 125,832.00	184.50	\$ 131,610.00	189.11	\$ 137,537.80	193.84	\$ 143,619.68	198.69	\$ 149,855.64
TSA / Speech Academy - Easton	\$ 182.50	205	4.75		160.00	\$ 51,301.25	164.00	\$ 53,581.88	168.10	\$ 55,921.95	172.30	\$ 58,321.48	176.61	\$ 60,782.50
Gengras Center - West Hartford		0			190.00	\$ -	194.75	\$ -	199.62	\$ -	204.61	\$ -	209.73	\$ -
Arch Bridge - Bethlehem	\$ 165.00	212		0	160.00	\$ 33,920.00	164.00	\$ 34,768.00	168.10	\$ 35,637.20	172.30	\$ 36,527.60	176.61	\$ 37,441.32
ACCESS - Danbury	\$ 148.00	202		3	160.00	\$ 96,960.00	164.00	\$ 99,384.00	168.10	\$ 101,868.60	172.30	\$ 104,413.80	176.61	\$ 107,025.66
Ben Bronze Academy - West Hart	\$ 170.00	180		0	190.00	\$ 34,200.00	194.75	\$ 35,055.00	199.62	\$ 35,931.60	204.61	\$ 36,829.80	209.73	\$ 37,751.40
Northwest Village/Wheeler Clinic	\$ 150.00	205		0	190.00	\$ 38,950.00	194.75	\$ 39,923.75	199.62	\$ 40,922.10	204.61	\$ 41,945.05	209.73	\$ 42,994.65
Solterra Academy - New Britain (\$ 150.00	206	6		190.00	\$ 62,624.00	194.75	\$ 65,456.50	199.62	\$ 68,363.16	204.61	\$ 71,343.98	209.73	\$ 74,401.02
Aide Daily Rate	\$ 16.60				19.00		20.50		22.04		23.62		25.24	
Annual Increase					\$ 1,012,528.75	-0.48%	\$ 1,052,300.88	3.93%	\$ 1,093,101.19	3.88%	\$ 1,134,940.22	3.83%	\$ 1,177,848.74	3.78%

Cumulative Total	\$ 5,470,719.77
Cumulative Increase	14.93%
Average Increase per Year	2.99%

Over / Under Ed: \$ 8,065.01 \$ (11,752.05) \$ (29,050.61) \$ (34,468.58) \$ (58,989.08)

Cumulative Savings w/EdAdvance \$ (126,195.31)

NEWTOWN PUBLIC SCHOOLS
Newtown, Connecticut

Jan 31

ENROLLMENT REPORT AS OF January 31, 2020

Current Monthly Enrollment

Cumulative Year-to-Date

Grade	Dec(e)	Added	Left	Jan	Aug 26th			Jan
	2019			2020	2019	Added	Left	2020
K	246	2	1	247	245	6	4	247
1	259	0	0	259	259	5	5	259
2	264	2	2	264	263	4	3	264
3	263	2	3	262	265	4	7	262
4	289	1	1	289	290	2	3	289
Total Elementary	1,321	7	7	1,321	1,322	21	22	1,321
5	275	0	0	275	277	0	2	275
6	284	1	0	285	285	2	2	285
Total Intermediate	559	1	0	560	562	2	4	560
7	337	1	0	338	342	2	6	338
8	337	1	1	337	342	1	6	337
Total Middle	674	2	1	675	684	3	12	675
9	350	2	0	352	347	7	2	352
10	358	1	1	358	358	4	4	358
11	382	1	0	383	384	2	3	383
12	425	0	1	424	426	2	4	424
Total High	1,515	4	2	1,517	1,515	15	13	1,517
<u>Special Education</u>								
Pre-Kdg	83	3	0	86	76	13	3	86
Community Partnership	16	0	0	16	16	0	0	16
Out-of-Town	39	2	1	40	40	2	2	40
TOTAL K-12	4,207	19	11	4,215	4,215	56	56	4,215
	=====	===	===	=====	=====	===	===	=====

ENROLLMENT BY SCHOOL

Hawley	300	1	2	299	304	3	8	299
Sandy Hook	365	3	3	365	368	6	9	365
Middle Gate	358	3	1	360	354	9	3	360
Head O' Meadow	298	0	1	297	296	3	2	297
Total	1,321	7	7	1,321	1,322	21	22	1,321
Reed Intermediate	559	1	0	560	562	2	4	560
Middle School	674	2	1	675	684	3	12	675
High School	1,515	4	2	1,517	1,515	15	13	1,517

Special Education

Pre-Kdg	83	3	0	86	76	13	3	86
Community Partnership	16	0	0	16	16	0	0	16
Out-of-Town	39	2	1	40	40	2	2	40
TOTAL K-12	4,207	19	11	4,215	4,215	56	56	4,215
	=====	===	===	=====	=====	===	===	=====

(e) = End Of Month

check 0 0 0 0 0 0 0 0

NEWTOWN PUBLIC SCHOOLS
Newtown, Connecticut

Jan 31

ELEMENTARY CLASS SIZES AS OF January 31, 2020

Grade	Hawley	Sandy Hook	Middle Gate	Head O' Meadow	Reed	TOTAL	check
Pre K		86				86	0
K	14	17	18	18			
	14	17	17	17			
	14	17	18	18			
	14	17	17				
Total K	56	68	70	53		247	0
1	20	17	15	18			
	20	15	15	17			
	20	18	16	17			
		17	16	18			
Total 1	60	67	62	70		259	0
2	19	19	18	19			
	19	20	18	18			
	20	19	18	18			
		20	19				
Total 2	58	78	73	55		264	0
3	20	16	20	25			
	19	20	20	25			
	18	20	20				
		18	21				
Total 3	57	74	81	50		262	0
4	17	20	19	23			
	18	19	19	23			
	16	20	18	23			
	17	19	18				
Total 4	68	78	74	69		289	0
Total K-4	299	365	360	297		1,321	0
check	0	0	0	0		0	