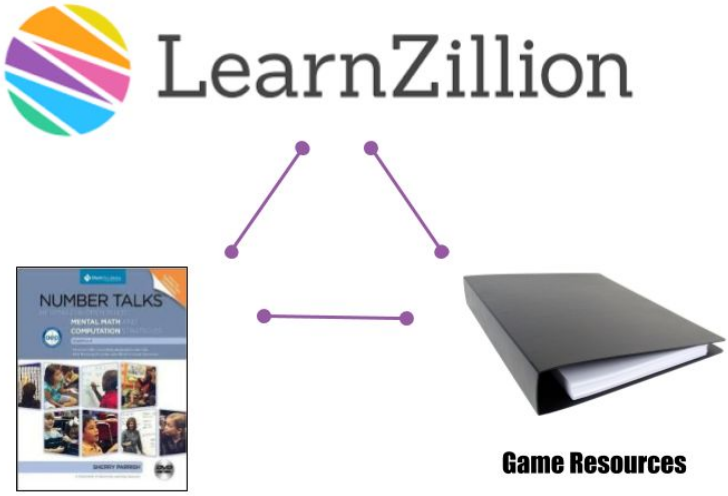
Grade 2: LearnZillion Pacing Guidance & Additional Supports
2017-2018 School Year

In Grade 2, instructional time should focus on four critical areas:

- Extending understanding of base-ten notation
- Building fluency with addition and subtraction
- Using standard units of measurement
- Describing and analyzing shapes

Eugene School District 4J Elementary math curriculum is comprised of LearnZillion with Number Talks and selected math games integrated. The following document contains pacing and usage guidance for these three components.



LearnZillion Pacing Guidance: Use the following to ensure students are given opportunities to master grade-level content standards. The start of the year (✪), suggested unit (**U#**) launch dates, non-student (**NS**) contact days, and an additional assessment day per unit are provided. Note that some dates were intentionally left unassigned to account for transition to or from breaks and added flexibility for state testing requirements. In an effort to consider the unique characteristics of each school and classroom, pacing guidance is not meant to be rigid rather informed by standards and data driven. Use information about the major, supporting and additional work for your grade-level and your professional judgement when meeting the needs of students. Reach out to your school's Staff Development Specialist if clarification or support is needed.

Number Talk Guidance: Number Talks are an essential instructional routine provided to support development of mental math fluency and strategic number sense. This important routine should be incorporated outside of the 60-minute math block on a regular basis. A variety of Number Talks have been recommended for use at the start of school, fall, winter and spring. Use your professional judgement along with the collaborative efforts of building staff and Staff Development Specialists when meeting the needs of students.

Game Resource Guidance: It is critical to note that fluency requires a balance of conceptual understanding and computational procedures. Well-posed and engaging math games afford students excellent opportunities to develop this understanding**.** These games have been identified in Investigations and other resources and provided by unit to reinforce prior knowledge concepts or enhance the key concepts of a unit. Guidance is provided for when and how to integrate these games, however, use your professional judgement when meeting the needs of students.

GRADE 2 PACING GUIDE

KEY:

Color by Domain	NF	OA	CC	GEO	NBT	MD

✪ = 1st day of school	U# = Unit launch day	NS = No student day	Major Work	Supporting Work	Additional Work

Total LearnZillion Lessons: 145 + 14 Assessments*

September				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
				1
4	5	6 ✪	7	8
11	12	13	14 U1	15
18	19	20	21	22
25	26	27	28	29

October				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
2	3	4	5	6 U2
9	10	11	12	13 NS
16	17	18	19	20
23	24 U3	25	26	27
30	31			

November				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
		1	2	3
6	7	8 U4	9	10 NS
13	14	15	16	17 U5
20	21	22	23 NS	24 NS
27	28	29	30	

Reporting Period 1:
LearnZillion Units 1-7

UNIT 1: Adding and subtracting within 100
Lessons: 16 (15+assessment)
2.OA.B.2, **2.NBT.B.5**
MP1 - Make sense of problems and persevere in solving them
MP7 - Look for and make use of structure

UNIT 2: Exploring standard units of length
Lessons: 11 (10+assessment)
2.MD.A.1, **2.MD.A.2**
MP5 - Use appropriate tools strategically

UNIT 3: Relating addition and subtraction to length
Lessons: 11 (10+assessment)
2.OA.A.1, **2.MD.B.5,** **2.MD.B.6**
MP5 - Use appropriate tools strategically
MP6 - Attend to Precision
MP7 - Look for and make use of structure

UNIT 4: Relating skip counting to time
Lessons: 6 (5+assessment)
2.MD.C.7, **2.NBT.A.2**
MP6 - Attend to Precision
MP7 - Look for and make use of structure

December				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
				1
4	**5**	**6**	**7**	**8**
11 U6	**12**	**13**	**14**	**15**
18 NS	**19** NS	**20** NS	**21** NS	**22** NS
25 NS	**26** NS	**27** NS	**28** NS	**29** NS

January				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
1 NS	**2** NS	**3**	**4**	**5**
8	**9**	**10**	**11**	**12** U7
15 NS	**16**	**17**	**18**	**19**
22	**23**	**24**	**25**	**26**
29	**30** U8	**31**		

UNIT 5: Solving problems involving money
Lessons: 11 (10+assessment)
2.MD.C.8
MP2 - Reason abstractly and quantitatively
MP4 - Model with mathematics

UNIT 6: Understanding three-digit numbers
Lessons: 11 (10+assessment)
2.NBT.A.1.a, 2.NBT.A.1.b 2.NBT.A.2
MP3 - Construct viable arguments and critique the reasoning of others
MP7 - Look for and make use of structure

UNIT 7: Expressing and comparing three-digit numbers
Lessons: 11 (10+assessment)
2.NBT.A.3, 2.NBT.A.4
MP3 - Construct viable arguments and critique the reasoning of others
MP6 - Attend to Precision
MP7 - Look for and make use of structure

Winter Grade 2 Report Cards Notes:

Operations and Algebraic Thinking
- Work with equal groups of objects to gain foundations for multiplication (NOT YET TAUGHT)

Numbers and Operations in Base Ten
- Use place value understanding and properties of operations to add and subtract (NOT YET TAUGHT)

Measurement and Data
- Measure and estimate lengths in standard units
  - 2.MD.3 & 2.MD.4 (NOT YET TAUGHT)
- Represent and interpret data (NOT YET TAUGHT)

Geometry
- Reason with shapes and their attributes (NOT YET TAUGHT)

February				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
			1	**2** NS
5	**6**	**7**	**8** U9	**9**
12	**13**	**14**	**15**	**16**
19 NS	**20**	**21**	**22**	**23**
26	**27**	**28**		

March				
Mon	Tue	Wed	Thu	Fri
			1	**2**
5 U10	**6**	**7**	**8**	**9**
12	**13**	**14**	**15**	**16**
19	**20** U11	**21**	**22**	**23**
26 NS	**27** NS	**28** NS	**29** NS	**30** NS

April				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
2 NS	**3**	**4**	**5**	**6**
9	**10**	**11**	**12**	**13**
16	**17**	**18**	**19**	**20** U12
23	**24**	**25**	**26**	**27**
30				

Reporting Period 2:

LearnZillion Units 8-14

UNIT 8: Relating skip counting to mental addition and subtraction

Lessons: 6 (5+assessment)

2.NBT.A.2, 2.NBT.B.8

MP8 - Look for and express regularity in repeated reasoning

UNIT 9: Generating and representing measurement data to solve problems

Lessons: 16 (15+assessment)

2.OA.A.1, 2.MD.D.9, 2.MD.D.10

MP1 - Make sense of problems and persevere in solving them

MP3 - Construct viable arguments and critique the reasoning of others

MP4 - Model with mathematics

UNIT 10: Reasoning with shapes and their attributes

Lessons: 11 (10+assessment)

2.G.A.1, 2.G.A.3

MP2 - Reason abstractly and quantitatively

MP3 - Construct viable arguments and critique the reasoning of others

UNIT 11: Applying strategies to add and subtract within 100

Lessons: 16 (15+assessment)

2.NBT.B.6, 2.NBT.B.7, 2.NBT.B.9

MP1 - Make sense of problems and persevere in solving them

MP8 - Look for and express regularity in repeated reasoning

UNIT 12: Developing foundations of multiplication through exploring even and odd numbers

Lessons: 11 (10+assessment)

2.OA.C.3

MP4 - Model with mathematics

MP7 - Look for and make use of structure

May				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
	1	**2**	**3**	**4** NS
7	**8** U13	**9**	**10**	**11**
14	**15**	**16**	**17**	**18**
21	**22**	**23** U14	**24**	**25**
28 NS	**29**	**30**	**31**	

June				
Mon	**Tue**	**Wed**	**Thu**	**Fri**
				1
4	**5**	**6**	**7**	**8** NS
11	**12**	**13**	**14**	**15** ✪
18	**19**	**20**	**21**	**22**
25	**26**	**27**	**28**	**29**

UNIT 13: Using arrays for foundations of multiplication

Lessons: 11 (10+assessment)

2.OA.C.4, 2.G.A.2

MP6 - Attend to Precision

MP7 - Look for and make use of structure

UNIT 14: Estimating and comparing lengths

Lessons: 11 (10+assessment)

2.MD.A.3, 2.MD.A.4

MP2 - Reason abstractly and quantitatively

MP3 - Construct viable arguments and critique the reasoning of others

MP5 - Use appropriate tools strategically

*** Supplemental Resources**

UNIT 15: Demonstrating fluency in addition and subtraction (16 Lessons)

2.OA.A.1, 2.OA.B.2 2.NBT.B.5

MP1 - Make sense of problems and persevere in solving them

MP6 - Attend to Precision

MP8 - Look for and express regularity in repeated reasoning

Developing Math Fluency with Grade 2 Number Talks

Overview: Number Talks supports the development of students' procedural fluency from conceptual understanding. This instructional routine takes about 5-15 minutes. The routine structures classroom conversation around purposefully ordered computation problems that students solve mentally.

Recommended Number Talk Sets
<u>Introduction</u> (Establishing expectations for Number Talks)
Grade 1 - Addition: Doubles/Near Doubles ● Rekenreks ● Double Ten-Frames ● Number Sentences Grade 1 - Addition: Making Ten ● Rekenreks ● Double Ten-Frames ● Number Sentences Grade 1 - Addition: Making Landmark or Friendly Numbers
<u>Fall</u>
Grade 2 - Addition ● Friendly Numbers
<u>Winter</u>
Grade 2 - Addition ● Breaking into Place Value ● Adding Up in Chunks ● Adding Up
<u>Spring</u>
Grade 2 - Addition ● Compensation Grade 2 - Subtraction ● Removal ● Counting Back

Common Tools:

- Dots
- Rekenreks
- Five/Ten Frames
- Open Number line
- Hundreds Chart
- Cubes, Tiles, Counters
- Real-life Context

General Prompts:

- I agree with _____ because _____.
- I do not understand _____. Can you explain this again?
- I disagree with _____ because _____.
- How did you decide to _____?

Practicing Math Fluency with Grade 2 Games

Purpose: Games provide additional practice to develop fluencies and opportunity to encourage a positive relationship with mathematics and peers. While teachers have identified 2-4 games per unit to support Operations and Algebraic Thinking, other game resources have been included in a Grade-level Games Binder. Teachers are encouraged to enhance standards with other materials or activities at their discretion. Game structures such as partners, small group, or differentiated review rely on a solid foundation of positive mathematical mindsets and clear community expectations. Unit 0 provides many instructional strategies to enhance such an environment.

Unit	Game Name	Source	Standard(s)
Unit 1	Double Compare Guess My Number Get to 100 Roll a Square Unroll a Square	Investigations Investigations Investigations Investigations Investigations	1.OA.A.1 2.OA.B/C 2.NBT - 5, 6 2.NBT.5 2.NBT.5
Unit 2*	Scavenger Hunt Land of Inch Story & Activity	Investigations Investigations	2.MD.3 2.MD.4
Unit 3	Get to 100 Roll a Square Unroll a Square	Investigations Investigations Investigations	2.NBT - 5, 6 2.NBT.5 2.NBT.5
Unit 4*			
Unit 5	Collect 25 Cents Collect 50 Cents Collect $1 Spend $1	Investigations Investigations Investigations Investigations	2.OA.2, 2.MD.8 2.MD.8 2.NBT - 5, 6, 2.MD.8 2.NBT - 5, 6, 2.MD.8
Unit 6	A”mazing” 100 Build Ten Close to 100	Other Resource Other Resource Other Resource	2.OA.B , 2.NBT.A/B 2.OA.B 2.OA.B , 2.NBT.A/B
Unit 7	A”mazing” 100 Build Ten Close to 100	Other Resource Other Resource Other Resource	2.OA.B , 2.NBT.A/B 2.OA.B 2.OA.B , 2.NBT.A/B
Unit 8	Circles and Stars Making Moves on the 100s Chart	Other Resource Other Resource	2.OA.B/C 2.OA.B/C
Unit 9*			
Unit 10*			
Unit 11*	Close to 1000	Other Resource	2.OA.B, 2.NBT.A/B
Unit 12	Odd or Even?	Other Resource	2.OA.B/C

Unit 13	Double It Double Arrays Circle and Stars	Investigations Investigations Other Resource	2.NBT.6 2.OA.4 2.OA.B/C
Unit 14*			

* No additional aligned games for this unit at this time. Please select from the Games Resources binder to support prior knowledge.