

# Using Calendar Quests in Grades 1-5

Number Agility

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## CALENDAR QUEST



Daily Math  
Practice



# Shape of the Session

- Introduction to Calendar Quests
- Sample Calendar Quest session
- Connecting Calendar Quests and Number Sense
- Connecting Calendar Quests and The BC Curriculum
- Questions and Discussion

Date	Rows	Columns	Area	Perimeter
1	1	2	$1 \times 2 = 2$	
2	2	2	$2 \times 2 = 4$	
3	3	2	$3 \times 2 = 6$	
4	4	2	$4 \times 2 = 8$	
5	5	2	$5 \times 2 = 10$	
6	6	2	$6 \times 2 = 12$	
7	7	2	$7 \times 2 = 14$	
8	8	2	$8 \times 2 = 16$	
9	9	2	$9 \times 2 = 18$	
10	10	2	$10 \times 2 = 20$	
11	11	2	$11 \times 2 = 22$	
12	12	2	$12 \times 2 = 24$	
13	13	2	$13 \times 2 = 26$	
14	14	2	$14 \times 2 = 28$	
15	15	2	$15 \times 2 = 30$	
16	16	2	$16 \times 2 = 32$	
17	17	2	$17 \times 2 = 34$	
18	18	2	$18 \times 2 = 36$	
19	19	2	$19 \times 2 = 38$	
20	20	2	$20 \times 2 = 40$	
21	21	2	$21 \times 2 = 42$	
22	22	2	$22 \times 2 = 44$	
23	23	2	$23 \times 2 = 46$	
24	24	2	$24 \times 2 = 48$	
25	25	2	$25 \times 2 = 50$	
26	26	2	$26 \times 2 = 52$	
27	27	2	$27 \times 2 = 54$	
28	28	2	$28 \times 2 = 56$	
29	29	2	$29 \times 2 = 58$	
30	30	2	$30 \times 2 = 60$	

## NUMBER AGILITY

A grid for number agility exercises. The top row contains 10 circles. Below it are two rows of 10 squares each. The grid is used for various mathematical activities.

12 x 12 MULTIPLICATION TABLE

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

BIRTHDAYS

Month	Day	Name
Jan	1	
Jan	2	
Jan	3	
Jan	4	
Jan	5	
Jan	6	
Jan	7	
Jan	8	
Jan	9	
Jan	10	
Jan	11	
Jan	12	
Jan	13	
Jan	14	
Jan	15	
Jan	16	
Jan	17	
Jan	18	
Jan	19	
Jan	20	
Jan	21	
Jan	22	
Jan	23	
Jan	24	
Jan	25	
Jan	26	
Jan	27	
Jan	28	
Jan	29	
Jan	30	
Jan	31	

DIFFICULT READS

1	2	3	4	5	6	7	8	9
11	12	13	14	15	16	17	18	19
21	22	23	24	25	26	27	28	29
31	32	33	34	35	36	37	38	39
41	42	43	44	45	46	47	48	49
51	52	53	54	55	56	57	58	59
61	62	63	64	65	66	67	68	69
71	72	73	74	75	76	77	78	79
81	82	83	84	85	86	87	88	89
91	92	93	94	95	96	97	98	99



# Who Am I?

- Amanda Younger
- Grade 4 Teacher at Langley Fundamental Elementary
- Professional Masters in Education as a Classroom Specialist with a focus on Mathematics Education – Queens University 2024
  - Focused on developing number sense and the stages of number sense development
- My 9<sup>th</sup> year in Langley

# What is a Calendar Quest

Month long visual  
pattern

Uses the calendar  
to help arrange the  
visuals

Patterns are multi  
layered and contain  
2-4 separate  
patterns

Patterns Build from  
day to day

Low Threshold –  
High Ceiling Task

Oral math routine

Limited written  
language

Takes 10-15  
Minutes Per Day

Number talks are  
pre planned for the  
entire month

Designed for all  
students to have an  
entry point

Print and go  
patterns

Low prep for  
teachers

# Who Is It For?

- The whole class
  - Layering in multiple patterns allows for adaptations and extensions
  - Visuals reduce the need for reading skills
- All grade levels
  - Can pick and choose from the patterns to fit the needs of your class
  - Can create your own patterns

# The Daily Routine

- Skip Counting / Counting Practice
- Calendar Quest
- Measurement Moment or Money Matters

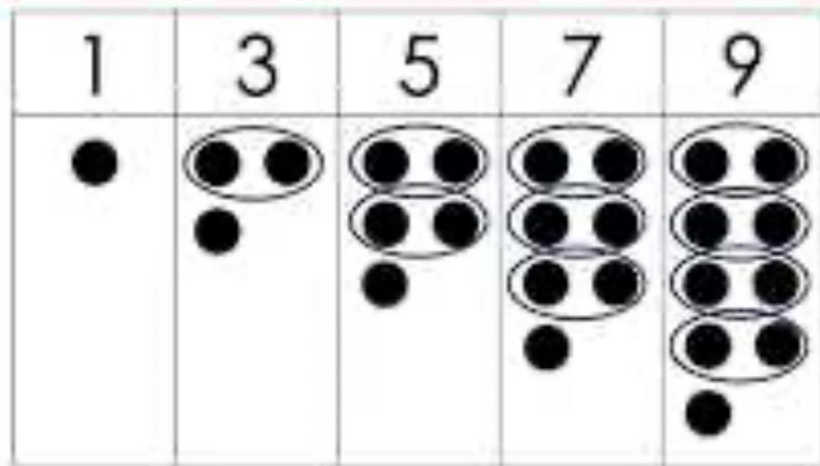
# Sample Calendar Quest Session



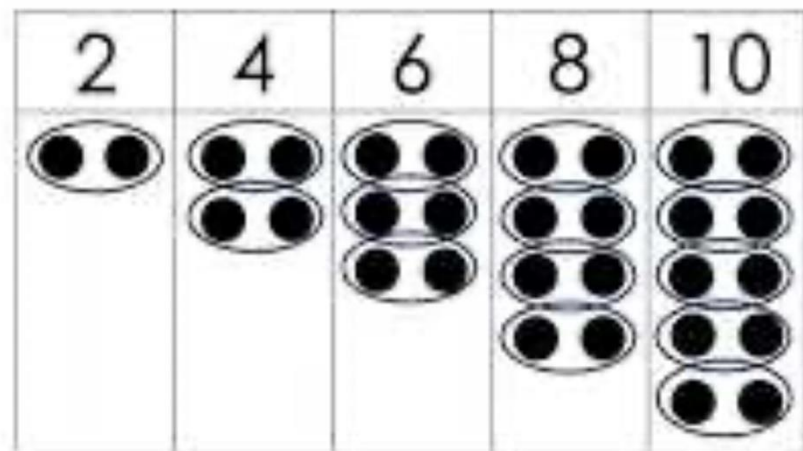


# Learn Odd and Even to You Belong with Me by Taylor Swift

If it ends with 1, 3, 5, 7, 9 it's odd  
They can't be split up evenly



0, 2, 4, 6, 8 numbers are even!





# *count by 2 to 22 by taylor swift*

**I don't know about you...  
but I can count by 2!**

**2, 4, 6, 8, 10, 12**

**14, 16, it's true!**

**2 x 9 is 18**

**20 we're almost through  
Everything will be**

**doubled...**

**2 x 11 is 22**

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**Count by 10 to Paul Russell Little Boo Thang**

**You my little boo thang**

**Come on let's count by 10**

**10, 20, 30, 40**

**Shooting that shot like 50**

**Yeah I know, 60, 70 yeah**

**80, 90, 100 yeah I know**

**110, 120, yeah we're counting by 10!**

**10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120**

# Calendar Quest Sample Session

- Pretend you are one of your own students

# What Kids Say About Calendar Quests

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I like the mystery pattern, I'm excited to know what it is

---

Have challenging patterns or it gets boring

---

It's fun to try and guess the pattern

---

The patterns repeat over the whole month

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I like getting a new pattern every month

---

I like making the collections

---

There is always more than one pattern in it

---

It keeps you curious

---

It feels creative

---

It's fun and you want to do more

---

I'm excited and happy to see what the next card is

---

I like finding all the different patterns the next day could have feels excited and happy

---

I feel curious when I see the patterns

---

It feels adventures because it's cool exploring new patterns you can create

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I feel imaginative because you can think of so many possibilities of what it could be next

The Five  
Number Sense  
Strands

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Counting And Subitizing

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Number Representations

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Place Value And Base 10

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Types Of Numbers

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Number Relationships

# How Do Calendar Quests Support Number Sense Development?

- Counting and Subitizing
  - Frequent counting patterns in all grade levels
- Number Representations
  - Each month has a visual pattern
  - Many months use multiple images to represent numbers
- Types of Numbers
  - Use of currency
  - Fractions and decimal patterns
  - Supported in Measurement Moments and Money Matters
- Place Value and Base Ten
  - Supported in Measurement Moments and Money Matters
  - Multiple Representations of numbers
  - Make target number patterns
- Number Relationships
  - Addition and multiplication patterns
  - Part – whole relationships
  - Pattern changes
  - Tracking the change in patterns from day to day

Grade	1	2	3	4	5
Month 1	Today's Date – Ten Frames	Roman Numerals Multiples Of 2	Ancient Egyptian Numerals Multiples Of 3	Ancient Aegean Numerals Multiples Of 9	Mayan Numerals Multiples Of By 11
Month 2	Multiple Representation Of Numbers – Count By 2	Multiple Representations Of Numbers Count By 5s	Multiple Representations Of Numbers Count By 10s	Multiple Representations Of Number – Fibonacci Sequence	Multiple Representations Of Numbers Square Of The Date
Month 3	Make 10	Make 20	Addition Mystery	Multiplication Models - Today's Date	Multiplication Area And Perimeter
Month 4	Shapes 3, 4 or 5 Sides	Shapes And Attributes	Quadrilaterals Puzzle	3 Dimensional Shapes	2 And 3 Dimensional Shapes
Month 5	2 And 3d Shapes	Make 100	Equal Groups Multiplication – Today's Date	Array Puzzle	Fractions And Decimals
Month 6	Counting By 5s	Take From 20	Pattern Block Fractions	Area And Perimeter	Equivalent Fractions
Month 7	Counting By 10	Counting By 5	Halves And Quarters – Chocolate Bars	Unit Fractions	Adding Fractions
Month 8	Make 20	Counting By 10	Array Of The Day	Division Models	Division Puzzle
Month 9	Nickle, Dime, Quarter	Canadian Coins	Adding Canadian Coins	Coin Puzzle	Money Puzzle
Month 10	Function Machine	Function Machine	Function Machine	Function Machine	Function Machine

# Calendar Quest Overview



# Calendar Quests and the Curricular Competencies

- Use reasoning to explore and make connections
- Estimate reasonably
- Develop mental math strategies and abilities to make sense of quantities
- Model mathematics in contextualized experiences
- Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving
- Visualize to explore mathematical concepts
- Develop and use multiple strategies to engage in problem solving
- Communicate mathematical thinking in many ways
- Use mathematical vocabulary and language to contribute to mathematical discussions
- Explain and justify mathematical ideas and decisions
- Represent mathematical ideas in concrete, pictorial, and symbolic forms
- Reflect on mathematical thinking

# Implementation

What parts would you like to try in your classroom?

My recommendation

Calendar quest

Choral Counting

Measurement Moments  
/ Money Matters



# Creating Your Own

- Choose 1 core skill for the month
- Choose a numerical pattern
- Decide what will work to present the pattern visually or how you will use a secret code
- Create your master observation chart to lay out your ideas
- Create your Calendar Quest cards
  - Use lots of visuals and colours

# Skill

- Multiple Representations of Numbers
- Counting by 15s

# Creating Your Master Observations Chart

Date	Number	Representation
1	0	Numeral
2	15	Word
3	30	Base Ten Blocks
4	45	Expanded Form
5	60	Place Value Chart
6	75	Numeral
7	90	Word
8	105	Base Ten Blocks
9	120	Expanded Form
10	135	Place Value Chart
11	150	Numeral
12	165	Word
13	180	Base Ten Blocks
14	195	Expanded Form
15	210	Place Value Chart

# Create Your Visuals

- Use a table to format your cards
- Set the size for your calendar pocket chart or other space
  - I do 10cmx10cm
- Have a simple background
  - White allows your pattern to stand out and be what students focus on
- Make your dates simple and small
- Use bold visuals and colours to emphasize the pattern
- Make your pattern items large and the focus of your cards
- Avoid any words or images that are not part of the pattern

# Contact Me

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# Questions

- What are you wondering about Calendar Quests?