

Okanagan School of Education - LESSON PLAN TEMPLATE

Page One - Curriculum Connection/Pedagogical Plan

Candidate/Intern: Blake Clark

Lesson date:
TBD

Grade Level/Subject(s): 5/6 / Mathematics

Lesson Title/Task Summary:

Stand-Alone Lesson: Carry Collector (Adding to Millions and Billions)

A card game for 2 or 3 players: build two big numbers, add, and score a point for every carry. Gr 5 adds to millions, Gr 6 to billions. One period.

Core (Sub) Competency:
Critical & Reflective Thinking
Collaborating

Unit Focus: Grade 5/6 Mathematics - Adding to Millions and Billions
(stand-alone, follows Carry the One)

Big Idea(s):

What will the students **UNDERSTAND**? What are the key question(s) to be addressed?

(Gr 5/6) Computational fluency develops from a strong sense of number.

When do we carry, and what is the carried 1 worth?

Curricular Competencies:

What will the students be able to **DO**? What skills are being taught? Are learning targets or "I can..." statements written in student-friendly language?

1. I can line up place values and add big numbers.
2. I can carry when a column adds to 10 or more.
3. I can read my answer in millions (Gr 5) or billions (Gr 6).

Content:

What will the students **KNOW**? What content/concepts/key vocabulary will be the focus of this lesson?

1. (Gr 5) Addition and subtraction of whole numbers to 1 000 000
2. (Gr 6) Small to large numbers: place value and operations to billions
3. Key vocabulary: regroup, carry, place value, period, million, billion

Indigenous Perspectives:

How might "Indigenous knowledges and ways of knowing and being" be honoured and embedded authentically into the lesson?

1. Learning is holistic, reflexive, reflective, experiential, and relational.
2. Learning involves patience and time.

Learning through play with partners: players coach and check each other, column by column.

Inclusive and Equitable Practice:

How is a safe and caring environment provided (emotional/physical)? Are there considerations for diverse interests/abilities? Are there access points for all learners and alternative ways to demonstrate what they know/can do? What grouping strategies are incorporated? Do students see themselves reflected in the learning?

1. Picture rules, teacher modelling, digit cards with dot frames; a strong reader in each group.
2. Thousands mat first if needed; Gr 5 Millions; Gr 6 Billions. Challenge: fewest points wins.

Collaborative Practice:

How might collaboration/co-planning/co-teaching be incorporated?

Shared with grade 5/6 partner classes.

Safety Considerations:

Are there any lesson and/or venue specific safety issues to be noted?

No physical safety concerns. Friendly play: mistakes get fixed, not mocked.

Assessment Design

What type of assessment might be embedded in this lesson?

Formative Assessment: Assessment *for* Learning / **Summative Assessment:** Assessment *of* Learning.

Formative: look-fors while groups play (teacher notes); exit ticket.

Metacognition: How are students reflecting on and monitoring their own learning?

Where did you put your 9s, and why?

Documentation/Evidence of Learning: How will student learning be documented and shared (learning maps, rubrics, math journals, online documentation, etc.)

Sort exit tickets: carries with ease / needs the Thousands mat again.

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Page Two - Minute Minder

Considerations for lesson planning:		Estimated time	Teaching and Learning Activities What is the role of the teacher? What is the role of the students?	Teacher Preparation (Materials/resources or supplies needed)
CONNECT	PART ONE INTRODUCTION TO LESSON Activate Prior Knowledge, Engage, Predict, Focus How can I tap into students' interest, offer appropriate challenge, increase motivation?	10 Minutes	<ul style="list-style-type: none"> Warm-up: $586 + 437$ on the board. Where do we carry? Name the periods: ones, thousands, millions, billions. 	Video: Math Antics - Multi-Digit Addition: https://www.youtube.com/watch?v=mAvuom42NyY Video (periods review): Math Antics - Place Value: https://www.youtube.com/watch?v=T5Qf0qSSJFI
	PART TWO BODY OF LESSON Construct meaning, monitor understanding, process ideas How will I help students interact with ideas they encounter?	40 Minutes	<ul style="list-style-type: none"> I do: model a Thousands round on the projector game; think aloud. We do: class vs robot, Millions round; students vote on each box. You do: groups of 2 or 3 play; Gr 5 Millions mat, Gr 6 Billions mat. 	Projector game: https://blakeclark.ca/Grade%205-6%20Math%20Carry%20Collector%20Lesson/carry-collector-game.html Printables: How to Play, 3 mats, digit cards (or a deck: Ace = 1, 10 = 0) Video (Gr 5 model): Khan Academy - Adding multi-digit numbers: https://www.khanacademy.org/math/cc-fourth-grade-math/imp-addition-and-subtraction-2/imp-adding-multi-digit-numbers/v/adding-multi-digit-numbers-with-regrouping

TRANSFORM	<p><u>PART THREE</u></p> <p>CLOSURE OF LESSON</p> <p>Apply knowledge; reflect on thinking and learning</p> <p>How can I provide learners with alternative ways to demonstrate what they know?</p>	10 Minutes	<ul style="list-style-type: none"> • Debrief: Where did your 9s go? Can a carry make another carry? • Exit ticket (printable). Key: 1 178 191 (6 pts); 1 106 789 202 (7 pts); 10; left. 	<p>Practice: Khan Academy - Multi-digit addition: https://www.khanacademy.org/math/cc-fourth-grade-math/imp-addition-and-subtraction-2/imp-adding-multi-digit-numbers/e/multi-digit-addition</p> <p>Super Teacher (login): Understanding Place Value (7 Digits): https://www.superteacherworksheets.com/place-value/understanding-place-value-7-digit_UPVSV.pdf</p> <p>Super Teacher (login, Gr 6): Anchor Chart: 10-Digit Place Value: https://www.superteacherworksheets.com/place-value/place-value-anchor-chart-ten-digit_PVACT.pdf</p>
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Exit Ticket

Carry Collector: Adding to Millions and Billions

5/6 Mathematics - Carry Collector

Name: _____ Date: _____

1. Add. Write each carry in a carry box.

(Everyone (Grade 5))

$$648\,375 + 529\,816$$

	MILL.	THOUSANDS			ONES	
carry						
+						
=						

Carries: ____ Gold box carry? yes / no Points: ____

2. Add. Write each carry in a carry box.

(Grade 6 / challenge)

$$635\,482\,917 + 471\,306\,285$$

	BILL.	MILLIONS			THOUSANDS			ONES	
carry									
+									
=									

Carries: ____ Gold box carry? yes / no Points: ____

3. Fill in the blanks.

I carry when a column adds up to ____ or more.

The carried 1 moves one column to the _____.

Self-check: Today I can carry when I add big numbers.

[] Yes, on my own [] Getting there [] I need more help

Carry Collector

Grade 5/6 Math | Adding to millions and billions | Teacher notes



BC Math 5: addition and subtraction of whole numbers to 1 000 000.

BC Math 6: small to large numbers (thousandths to billions): place value and operations with thousandths to billions.

Both: Computational fluency develops from a strong sense of number. Learn through play.

Levels at a glance

Mat	Who	Numbers	Cards per round	Points per round
Thousands	Warm-up for everyone	3-digit + 3-digit	6	up to 5
Millions	Grade 5	6-digit + 6-digit	12	up to 8
Billions	Grade 6	9-digit + 9-digit	18	up to 11

You need (per group of 2 or 3)

- 1 set of 40 digit cards (the 2 Digit Cards pages, on cardstock), or a deck of cards: Ace = 1, 10 = 0, remove J, Q, K
- 1 mat per player, and a pencil
- Optional: sheet protectors and dry-erase markers

How it works

- One flip, everyone writes: all players use the same digit, so no one waits.
- Placement is the strategy: big digits stacked in one column make carries.
- Wrong answer = 0 points, so checking matters.

Teach it (about 15 min before groups play)

- **I do:** play one Thousands round on the projector game. Think aloud: "Where should this 8 go?"
- **We do:** class vs robot on the projector, Millions mat. Students vote on each box.
- **You do:** groups play 2 or 3 rounds. Gr 5: Millions. Gr 6: Billions. Start anyone unsure on Thousands.

Look-fors while you circulate

- Starts at the ones and lines up columns
- Writes the carry in the star, never 2 digits in one box
- Adds the carried 1 to the next column
- Reads the answer by periods ("1 billion, 245 million...")

Debrief questions

- Where did you put your 9s? Why?
- What makes a carry happen?
- Can a carry make another carry? Show us.
- What is the 1 in the crown box worth?

Easier

Thousands mat, or roll one regular die (digits 1 to 6). Pair a strong reader with each group.

Challenge

Fewest points wins: avoid carries! Or play Billions and read every answer aloud.

Checking

Partners re-add. A calculator is for checking only, after the round.

Carry Collector: How to Play

Make carries. Collect stars. Win!



2 or 3 players

Digit cards

1 mat each

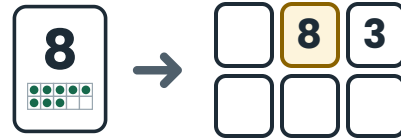
Pencil

1 FLIP



Flip 1 card. Say the number.
Everyone uses it.

2 WRITE



Write it in any empty box.
It stays there!
Keep flipping until every box is full.

3 ADD

	THOUSANDS	ONES		
	O	H	T	O
carry		★	★	
		5	8	6
+		4	3	7
=	1	0	2	3

Start on the right. 10 or more?
Carry the 1 to a ★

4 SCORE

★ = 1 👑 = 3

Example: 2 ★ + 1 👑 = 5 points

Swap mats and check.
Wrong answer? Fix it. 0 points.

New round = new flipper 3 rounds. Most points wins!

Read your answer: say each period, then its name

1 **245** **052** **222**
1 billion, 245 million, 52 thousand, 222

Think! Where will a 9 make a carry?

Think! Can one carry make another carry?

Carry Collector: Thousands

Warm-up for everyone | 6 cards each round | up to 5 points a round



Name: _____

Partners: _____

Date: _____

1 Flip a card.
Everyone uses it.

2 Write it in any box.
It stays!

3 Add. Carry the 1
to a ☆

4 Check. ☆ = 1 point
👑 = 3 points

THOUSANDS	ONES		
O	H	T	O
carry	☆	☆	
+			
=	👑		

Round 1

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

THOUSANDS	ONES		
O	H	T	O
carry	☆	☆	
+			
=	👑		

Round 2

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

THOUSANDS	ONES		
O	H	T	O
carry	☆	☆	
+			
=	👑		

Round 3

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

Round 1 _____ + Round 2 _____ + Round 3 _____ = Total _____

Carry Collector: Millions

Grade 5 | 12 cards each round | up to 8 points a round



Name: _____

Partners: _____

Date: _____

1 Flip a card.
Everyone uses it.

2 Write it in any box.
It stays!

3 Add. Carry the 1
to a ☆

4 Check. ☆ = 1 point
👑 = 3 points

	MILLIONS	THOUSANDS			ONES		
	O	H	T	O	H	T	O
carry		☆	☆	☆	☆	☆	
+							
=	👑						

Round 1

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

	MILLIONS	THOUSANDS			ONES		
	O	H	T	O	H	T	O
carry		☆	☆	☆	☆	☆	
+							
=	👑						

Round 2

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

	MILLIONS	THOUSANDS			ONES		
	O	H	T	O	H	T	O
carry		☆	☆	☆	☆	☆	
+							
=	👑						

Round 3

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

Round 1 _____ + Round 2 _____ + Round 3 _____ = Total _____

Carry Collector: Billions

Grade 6 | 18 cards each round | up to 11 points a round



Name: _____

Partners: _____

Date: _____

1 Flip a card.
Everyone uses it.

2 Write it in any box.
It stays!

3 Add. Carry the 1
to a ☆

4 Check. ☆ = 1 point
👑 = 3 points

	BILLIONS	MILLIONS			THOUSANDS			ONES		
	O	H	T	O	H	T	O	H	T	O
carry		☆	☆	☆	☆	☆	☆	☆	☆	
+										
=	👑									

Round 1

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

	BILLIONS	MILLIONS			THOUSANDS			ONES		
	O	H	T	O	H	T	O	H	T	O
carry		☆	☆	☆	☆	☆	☆	☆	☆	
+										
=	👑									

Round 2

☆ x 1 = _____

👑 x 3 = _____

Points

Checked by _____

	BILLIONS	MILLIONS			THOUSANDS			ONES		
	O	H	T	O	H	T	O	H	T	O
carry		☆	☆	☆	☆	☆	☆	☆	☆	
+										
=	👑									

Round 3

☆ x 1 = _____

👑 x 3 = _____

Points

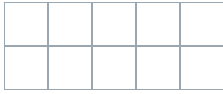
Checked by _____

Round 1 _____ **+ Round 2** _____ **+ Round 3** _____ **= Total** _____

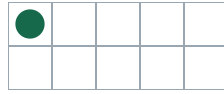
Digit Cards (1 of 2)

Cardstock. Cut on the dashed lines. Both pages = 1 group set.

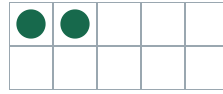
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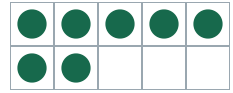
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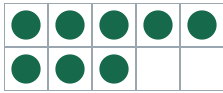
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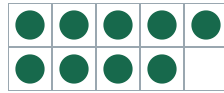
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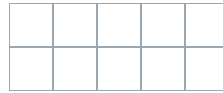
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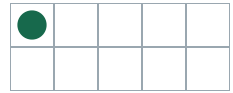
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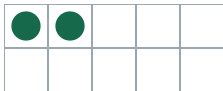
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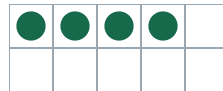
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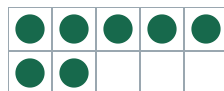
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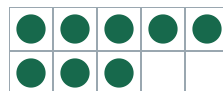
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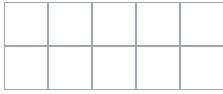
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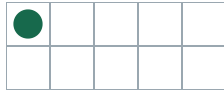
Digit Cards (2 of 2)

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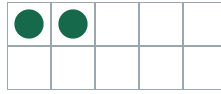
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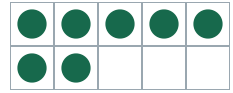
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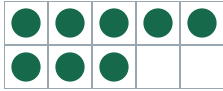
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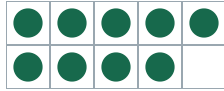
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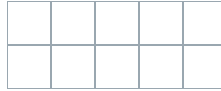
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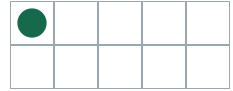
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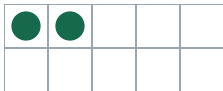
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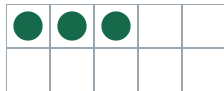
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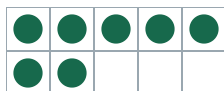
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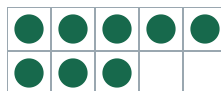
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