6-WEEK SMALL GROUP INTERVENTION PLAN

USING PLACE VALUE TO ADD

Grade Level: 2nd Grade | **Group Size:** 5 Students
Duration: 6 weeks | **Frequency:** 3 times per week (30 minutes per session)

📊 GROUP PROFILE

- **Grade Level:** 2nd Grade
- **Number of Students:** 5 students
- **Focus Area:** Using place value understanding to add within 100 and 1000
- **Duration:** 6 weeks (3x/week, 30-minute sessions = 18 total sessions)

🎯 BENCHMARK-BASED LEARNING GOALS

Based on the **ALN Grade 2 HLC Progressions**, this intervention addresses:

PRIMARY BENCHMARKS:

Operations with Addition:

- Students will add numbers accurately, flexibly, efficiently, and strategically **within 100** using place value understanding (in context, across multiple problem situations, and in equations)
- Students will progress toward adding **within 1000** using decomposition and place value strategies

Composition & Decomposition:

- Students will flexibly compose and decompose 2-digit and 3-digit numbers into place value parts
- Students will understand unitizing: 10 ones = 1 ten; 10 tens = 1 hundred

Place Value Understanding:

- Students will model and identify numbers that are 10 more/10 less within 100 and 1000
- Students will understand that each digit's position determines its value

Developing Fact Fluency:

- Students will use understanding of combinations to 10 to find combinations to 20, multiples of 10s partners to 100, and extend to 1000

📥 **Download ALN Grade 2 HLC Progressions**

📅 WEEK-BY-WEEK INTERVENTION PLAN

WEEK 1: BUILDING PLACE VALUE FOUNDATIONS (Sessions 1–3)

Focus: Understanding 2-digit numbers and their place value parts

Session 1 (30 minutes)

Launch (5 min): Visual Images - Dot Patterns #02
Display the dot pattern image and ask "What do you notice? What do you wonder?" Guide students to notice groupings of 5 or 10; connect to place value thinking
Main Activity (15 min): Place Value Compare Game
Students play in pairs using 2-digit cards only. Focus on comparing numbers by looking at tens place first, then ones place
Closure (10 min): Group Discussion
Each student shares one card comparison they made and explains how they knew which number was greater

📧 **Visual Images - Dot Patterns #02**   📧 **Place Value Compare Game**

Session 2 (30 minutes)

Launch (5 min): Additive Number String - Addition Facts within 10, Ten Frames
Quick mental math using ten frames. Connect "making 10" strategies to place value
Main Activity (15 min): Grade 2 Task - Adding and Subtracting on a Number Line
Students explore how addition strategies connect to place value. Focus on understanding that addition and subtraction are related operations
Closure (10 min): Turn and Talk
Students explain to a partner: "How does understanding tens and ones help us add?"

📧 **Number String - Ten Frames**   📧 **Grade 2 Task - Number Line**

Session 3 (30 minutes)

Launch (5 min): Additive Number String - Evaluate THEN Calculate - Addition Within 120
Students evaluate problems like 64 + 32 mentally before calculating. Discuss: "Which problems are easiest? Why?"
Main Activity (15 min): Place Value Golf Game
Use Recording Sheet A or B. Students roll dice to create 2-digit numbers matching specific criteria
Closure (10 min): Quick Share
Students share their favorite round and explain their strategy

📧 **Number String - Addition Within 120**   📧 **Place Value Golf Game**

WEEK 2: DECOMPOSING TO ADD WITHIN 100 (Sessions 4–6)

Focus: Decomposing one or both addends using place value

Session 4 (30 minutes)

Launch (5 min): Additive Number String - Adding multiples of 10 and near multiples within 100
Students notice patterns: 67 + 10, 67 + 11, 67 + 20, 67 + 19. Discuss how adding 19 is like adding 20 and adjusting
Main Activity (15 min): Grade 2 Task - Helping Solve A Problem #02
Students explore June's and Harrison's strategies for solving 82 – ___ = 43. Connect subtraction to addition using place value reasoning
Closure (10 min): Strategy Share
"Which strategy makes more sense to you? Why?"

📧 **Number String - Multiples of 10**   📧 **Grade 2 Task - Helping Solve**

Session 5 (30 minutes)

Launch (5 min): Mental Math Warm-Up
Call out problems like: 34 + 20, 34 + 21, 45 + 30, 45 + 29. Students show thumbs up when they have the answer
Main Activity (15 min): Place Value Compare Game
Now include 3-digit cards. Students practice reading and comparing larger numbers
Closure (10 min): Exit Ticket
Solve: 46 + 27. Show your thinking using place value.

📧 **Place Value Compare Game**

Session 6 (30 minutes)

Launch (5 min): Quick Number Talk
Display: 53 + 28. Ask students to turn and talk about how they would solve it
Main Activity (15 min): Grade 2 Task - Adding and Subtracting within 1000 on a Number Line
Students explore Sophie's strategy of using both addition and subtraction. Focus on understanding flexibility in problem-solving
Closure (10 min): Reflection
"What's one new addition strategy you've learned this week?"

📧 **Grade 2 Task - Within 1000**

WEEK 3: EXTENDING TO 3-DIGIT NUMBERS (Sessions 7–9)

Focus: Using place value to add within 1000

Session 7 (30 minutes)

Launch (5 min): Count Around the Circle
Count by 10s starting at different numbers (e.g., start at 247, count to 347). Highlight the pattern: only the tens place changes
Main Activity (15 min): Place Value Golf Game
Use Recording Sheet C (more challenging criteria). Students create 2-digit numbers to meet algebraic criteria
Closure (10 min): Strategy Discussion
"Which round was hardest? Why?"

📧 **Place Value Golf Game**

Session 8 (30 minutes)

Launch (5 min): Visual Images - Circles #01
Ask: "What do you notice? What do you wonder?" Connect observations to grouping and place value
Main Activity (15 min): Grade 2 Task - Adding and Subtracting on a Number Line (revisited)
Now focus on showing another way to solve 37 + ____ = 104. Encourage students to decompose both numbers
Closure (10 min): Journal Prompt
Students write about a strategy that helps them add larger numbers

📧 **Visual Images - Circles #01** 📧 **Grade 2 Task - Number Line**

Session 9 (30 minutes)

Launch (5 min): Number String
Display: 200 + 300, 210 + 300, 215 + 300. "What stays the same? What changes?"
Main Activity (15 min): Place Value Compare Game
Mixed 2-digit and 3-digit cards. Students discuss how they know which number is greater
Closure (10 min): Exit Ticket
Compare: 345 and 354. Which is greater? How do you know?

📧 **Place Value Compare Game**

WEEK 4: FLUENCY WITH ADDITION STRATEGIES (Sessions 10–12)

Focus: Flexible, efficient addition within 100 and 1000

Session 10 (30 minutes)

Launch (5 min): Additive Number String - Addition Within 120
Review problems: 64 + 32, 54 + 21, 35 + 23. "Which problem is easiest? Why?"
Main Activity (15 min): Grade 2 Task - Helping Solve A Problem #02 (revisited)
Students create their own similar problems and solve using two different strategies
Closure (10 min): Gallery Walk
Students post their problems and walk around to see others' strategies

📧 **Number String - Addition Within 120**   📧 **Grade 2 Task - Helping Solve**

Session 11 (30 minutes)

Launch (5 min): Mystery Number
"I'm thinking of a number. It has 4 tens and 7 ones. What's my number?" "How much is 10 more? 10 less?"
Main Activity (15 min): Place Value Golf Game
Students create their own recording sheet with custom criteria. Play with a partner
Closure (10 min): Share Custom Criteria
Each pair shares one creative criterion they created

📧 **Place Value Golf Game**

Session 12 (30 minutes)

Launch (5 min): Quick Images
Flash Visual Images - Dot Patterns #02 for 3 seconds. "How many dots did you see? How did you count them?"
Main Activity (15 min): Grade 2 Task - Adding and Subtracting within 1000 on a Number Line (revisited)
Students work on 435 – 245 using Sophie's strategy. Extend to addition: 435 + 245
Closure (10 min): Journal Prompt - Grade 2 #13
"Convince me that I can solve any subtraction problem using addition."

📧 **Visual Images - Dot Patterns #02**   📧 **Grade 2 Task - Within 1000**   📧 **Journal Prompt - Grade 2 #13**

WEEK 5: APPLYING PLACE VALUE TO REAL CONTEXTS (Sessions 13–15)

Focus: Using place value strategies in word problems and contexts

Session 13 (30 minutes)

Launch (5 min): Story Problem Warm-Up

"There are 34 students in Room A and 28 in Room B. How many total?" Students turn and talk about their strategy

Main Activity (15 min): Grade 2 Task - Adding and Subtracting on a Number Line

Students create their own word problems that match the equations in the task. Share with the group

Closure (10 min): Problem Swap

Students exchange problems with a partner and solve

📧 **Grade 2 Task - Number Line**

Session 14 (30 minutes)

Launch (5 min): Additive Number String - Adding multiples of 10 within 100

Review patterns with near multiples

Main Activity (15 min): Place Value Compare Game (Tournament Style)

Students compete in pairs; winner moves to next round. Observe strategies and flexibility

Closure (10 min): Reflection

"Which place value strategy do you use most often? Why?"

📧 **Number String - Multiples of 10**   📧 **Place Value Compare Game**

Session 15 (30 minutes)

Launch (5 min): Count by 100s

Start at any 3-digit number (e.g., 247) and count forward by 100s. "What changes? What stays the same?"

Main Activity (15 min): Grade 2 Task - Helping Solve A Problem #02

Students solve using both June's and Harrison's methods. Discuss which is more efficient for different problems

Closure (10 min): Exit Ticket

Solve 345 + 278. Show two different strategies.

📧 **Grade 2 Task - Helping Solve**

WEEK 6: REVIEW, ASSESSMENT & CELEBRATION (Sessions 16–18)

Focus: Demonstrate understanding and celebrate growth

Session 16 (30 minutes)

Launch (5 min): Student-Led Number String
Each student contributes one addition problem to solve together
Main Activity (15 min): Place Value Golf Game (Final Tournament)
Students play for accuracy and efficiency. Teacher observes and records strategies used
Closure (10 min): Strategy Share
"What's your favorite place value strategy?"

🛶 **Place Value Golf Game**

Session 17 (30 minutes)

Launch (5 min): Reflection Discussion
"How have you grown as a mathematician over the past 6 weeks?"
Main Activity (15 min): Assessment Tasks
Students complete selected problems from Grade 2 Task - Adding and Subtracting within 1000 on a Number Line. Observe student strategies and flexibility
Closure (10 min): Self-Assessment
Students rate their confidence with place value addition strategies

🛶 **Grade 2 Task - Within 1000**

Session 18 (30 minutes)

Launch (5 min): Celebration Circle
Each student shares one thing they're proud of learning
Main Activity (15 min): Place Value Compare Game (Free Play)
Students choose their game level and play for fun
Closure (10 min): Individual Conferences
Teacher meets briefly with each student to discuss next steps and growth

🛶 **Place Value Compare Game**

📊 PROGRESS MONITORING

Method 1: Observational Checklist (Weekly)

Use this checklist during sessions to track student progress. Check progress at the end of Weeks 2, 4, and 6.

Student Name	Compares 2-digit numbers using place value	Decomposes numbers to add within 100	Uses 10 more/10 less fluently	Adds within 100 flexibly	Extends strategies to 1000
Student 1	☐	☐	☐	☐	☐
Student 2	☐	☐	☐	☐	☐
Student 3	☐	☐	☐	☐	☐
Student 4	☐	☐	☐	☐	☐
Student 5	☐	☐	☐	☐	☐

Method 2: Exit Tickets (2x per week)

Sample Questions:

- **Week 1:** "What is 10 more than 47?"
- **Week 2:** "Solve 36 + 28. Show your thinking."
- **Week 3:** "Compare 245 and 254. Which is greater? How do you know?"
- **Week 4:** "Solve 156 + 237 using place value."
- **Week 5:** "Create a word problem for 345 + 178."
- **Week 6:** "Show two ways to solve 67 + 29."

Mastery Criteria: Student can complete exit ticket independently with 80% accuracy on 3 consecutive attempts

📦 MATERIALS LIST

Downloadable Resources:

1. ALN Grade 2 HLC Progressions

2. Place Value Compare Game

3. Place Value Golf Game

4. Grade 2 Task - Adding and Subtracting on a Number Line

5. **Grade 2 Task - Helping Solve A Problem #02**

6. **Grade 2 Task - Adding and Subtracting within 1000**

7. **Journal Prompt Grade 2 #13**

8. **Additive Number String - Addition Within 120**

9. **Additive Number String - Multiples of 10**

10. **Visual Images - Dot Patterns #02**

11. **Visual Images - Circles #01**

12. **Additive Number String - Ten Frames**

Concrete Materials:

- Base-10 blocks (hundreds, tens, ones)
- Place value cards (0-9, multiples of 10, hundreds)
- Two dice per pair
- Dry erase boards & markers
- Index cards for exit tickets
- Brass fasteners and cardstock strips (for Place Value Compare Game)

💡 DIFFERENTIATION NOTES

For Students Who Need More Support:

- Use base-10 blocks for every Main Activity
- Provide number lines (0-100 or 0-1000) as visual supports
- Allow partner work during independent practice
- Start with 2-digit numbers only; extend to 3-digit when ready

For Students Who Need Extension:

- Challenge with 3-digit addition involving regrouping
- Ask them to create word problems for their equations
- Have them explain strategies to peers
- Introduce missing addend problems (e.g., 345 + ___ = 600)

🎯 NEXT STEPS AFTER INTERVENTION

Students Are Ready to Advance When They Can:

- ✅ Independently add any 2-digit numbers using place value decomposition
- ✅ Explain why their chosen strategy works
- ✅ Flexibly choose between multiple strategies based on the numbers
- ✅ Extend place value understanding to 3-digit addition
- ✅ Use addition to solve subtraction problems (and vice versa)

Follow-Up Concepts:

1. Subtraction within 100 and 1000 using place value
2. Multi-step word problems involving addition and subtraction
3. Introduction to multiplication as repeated addition

Home Practice Resources:

- Send home copies of **Place Value Golf** recording sheets for family game nights
- Encourage counting by 10s and 100s from any starting number during car rides
- Share simple addition contexts: "We drove 45 miles today and 38 miles yesterday. How many total?"

📝 TEACHING TIPS

1. **Always connect to place value:** Every addition problem should include a conversation about "How many tens? How many ones?"
2. **Use multiple representations:** Show addition with base-10 blocks, number lines, AND equations side-by-side.
3. **Ask "Why?" constantly:** Don't just accept correct answers—have students explain their decomposition thinking.
4. **Celebrate multiple strategies:** There's no "one right way" to add—honor different approaches and discuss efficiency.
5. **Emphasize flexibility over speed:** Deep understanding beats quick answers every time.
6. **Build on what they know:** Always connect new strategies to combinations to 10 and patterns with multiples of 10.