

Topic: Numbers and Place Value

Duration: 45 minutes

Age Group: Early Years

Learning Objectives:

- Recognize and count numbers up to 100
- Understand place value (tens and ones)
- Count forwards and backwards confidently

Introduction to Numbers and Place Value (0-15 minutes)

"Today we're going on an exciting adventure with numbers! We're going to discover how numbers work together and learn some amazing number secrets."

[Display number cards 0-9 on the carpet area]

Learning Objectives Review:

- Recognize and count numbers up to 100
- Understand place value (tens and ones)
- Count forwards and backwards confidently

Engagement Strategies:

- Use "Number Detective" personas - give each child a magnifying glass
- Create excitement about discovering number patterns
- Incorporate movement for kinesthetic learners

"Let's meet our number friends! Who can find number zero for me?"

[Point to each number as children identify them]

[Expected: Children point to numbers, some may show fingers]

Support Strategies:

- SEN: Provide tactile numbers with different textures
- EAL: Use visual number cards with corresponding objects
- Extension: Ask children to show different ways to make each number

Building Number Sense (15-30 minutes)

"Now we're going to play a special game called 'Ten Frame Fun!'"

[Distribute individual ten frames and counting objects to each child]

Activity Sequence:

1. Show empty ten frame (1 minute)
 - Discuss what they see
 - Count the empty spaces together
2. Fill frames systematically (5 minutes)
 - Add objects one at a time

- Count after each addition
 - Discuss patterns forming
3. Partner check (3 minutes)
- Compare frames with partner
 - Practice saying numbers aloud

Key Vocabulary to Emphasize:

- "How many?"
- "Count with me"
- "One more than"
- "One less than"
- "Full" and "Empty"

Introduction to Place Value (30-45 minutes)

"We're going to learn a special secret about numbers - they have special houses where they live!"

[Draw large place value house on board with 'Tens' and 'Ones' rooms]

Place Value Concept Introduction:

- Tens are like big groups of 10 things
- Ones are single items
- Numbers have special rooms in their house

Demonstration Sequence:

1. Show single objects (3 minutes)
 - Count individual items
 - Place in 'Ones' room
2. Build groups of ten (5 minutes)
 - Count out 10 objects together
 - Bundle with elastic band
 - Place in 'Tens' room
3. Practice with numbers 11-20 (7 minutes)
 - Show one ten and extra ones
 - Count together
 - Record numbers

Common Misconceptions to Address:

- Thinking each digit represents its face value (2 in 23 is 2, not 20)
- Confusion between teen numbers and tens
- Difficulty understanding zero as a placeholder

Guided Practice Activities (45-60 minutes)

"Now it's your turn to be Place Value Champions! We're going to work in small groups to practice what we've learned."

[Organize class into 4 rotating stations]

Station Activities (10 minutes each):

1. Place Value Trading Post
 - Trade single cubes for tens sticks
 - Record trades on worksheet
 - Use place value cards to show numbers

2. Number Building Center

- Use base-10 blocks to build numbers
- Match to written numerals
- Draw representations in math journals

3. Digital Place Value Games

- Interactive whiteboard activities
- Place value apps on tablets
- Online math games

4. Teacher-Led Mini-Lessons

- Targeted instruction
- Individual assessment
- Immediate feedback

Station Adaptations:

- Support: Simplified recording sheets, fewer numbers
- Challenge: Larger numbers, mental math activities
- EAL: Visual supports and sentence frames

Independent Practice (60-75 minutes)

"You've all worked so hard learning about place value. Now let's show what we can do on our own!"

Independent Work Options:

- Place Value Workbook Pages
 - Drawing tens and ones
 - Writing numbers in expanded form
 - Comparing two-digit numbers
- Math Journal Prompts
 - "Show 3 different ways to make 24"
 - "Explain how you know 45 is greater than 54"
 - "Draw what happens when you add 10 to 37"

Monitoring Strategies:

- Circulate with clipboard for quick assessments
- Use colored stickers for self-checking
- Provide help cards for students to signal needs

Success Criteria:

- Can represent two-digit numbers using manipulatives
- Explains place value concepts using mathematical vocabulary
- Identifies tens and ones in written numbers
- Shows understanding through multiple representations

Plenary and Assessment (75-90 minutes)

"Let's come back together and share what we've learned about place value today!"

Closing Activities:

1. Place Value Show and Tell (5 minutes)
 - Selected students share their work
 - Class discusses strategies used
 - Celebrate successes
2. Quick Check Assessment (5 minutes)

- Exit ticket with 3 questions
- Self-assessment using traffic lights
- One thing learned/One question remaining

3. Next Steps Preview (5 minutes)

- Introduce homework extension
- Preview next lesson's learning
- Set learning goals

Teacher Reflection Points:

- Which concepts need reinforcement?
- Which students need additional support?
- What adjustments are needed for next lesson?
- How effective were the differentiation strategies?