

**Subject Area:** Mathematics  
**Unit Title:** Numbers and Place Value Adventure  
**Grade Level:** Reception/Year 1 (Age 5)  
**Lesson Number:** 1 of 8

**Duration:** 60 minutes  
**Date:** Ongoing Unit  
**Teacher:** Class Teacher  
**Room:** Primary Classroom

## Curriculum Standards Alignment

### Content Standards:

- Count to and across 100, forwards and backwards
- Read and write numbers from 1 to 20 in numerals and words
- Identify and represent numbers using objects and pictorial representations
- Use the language of: equal to, more than, less than (fewer), most, least

### Skills Standards:

- Recognize place value in two-digit numbers
- Compare quantities using mathematical language
- Use concrete materials to demonstrate understanding
- Develop systematic counting strategies

## Essential Questions & Big Ideas

### Essential Questions:

- How can we represent numbers in different ways?
- Why is place value important when working with numbers?
- How do numbers help us make sense of our world?
- What patterns can we find in numbers?

### Enduring Understandings:

- Numbers can be represented using different materials and symbols
- Place value helps us understand the size of numbers
- Numbers follow patterns that help us count and calculate
- We use numbers every day in real-life situations

## Pre-Lesson Preparation

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**Room Setup:**

- Arrange tables in groups of 4-6 for collaborative learning
- Create a dedicated 'Number Zone' with display materials
- Set up a place value village display with tens and ones houses
- Prepare carpet space for whole-class teaching
- Display number line and hundred square at child height

**Materials Needed:**

- Base-10 blocks (enough for each group)
- Place value cards (0-9 for tens and ones)
- Number formation guides and whiteboards
- Counting objects (cubes, counters, natural materials)
- Visual timetable cards and number tracks
- Self-checking cards and assessment materials

**Technology Requirements:**

- Interactive whiteboard for number demonstrations
- Visualizer for modeling with concrete materials
- Audio system for number songs and rhymes

## Differentiation Preparation

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**SEN Support Materials:**

- Tactile number cards with raised formations
- Color-coded place value materials
- Visual support cards for number recognition
- Modified recording sheets with larger spaces
- Number formation guides with directional arrows
- Individual number tracks and counting resources

**Extension Materials:**

- Challenge cards for independent work
- Problem-solving scenarios using larger numbers
- Investigation prompts for deeper thinking
- Open-ended recording materials

## Detailed Lesson Flow

### Introduction (10 minutes)

- Welcome children to the 'Number Adventure'
- Share learning objectives using visual cards
- Introduce 'Number Friends' characters
- Engage in counting warm-up song

#### Key Teaching Points:

- Model enthusiasm for number exploration
- Use clear, consistent mathematical vocabulary
- Incorporate movement in counting activities
- Check for engagement through observation

### Main Teaching (20 minutes)

- Introduce Place Value Village concept
- Demonstrate number building with concrete materials
- Model counting strategies using number line
- Practice number recognition and formation

#### Teaching Strategies:

- Use multi-sensory approaches
- Incorporate visual, auditory, and kinesthetic elements
- Regular check-ins for understanding
- Scaffold learning with structured support

### Guided Practice (20 minutes)

- Small group rotations through activities:
- Station 1: Building numbers with base-10 blocks
- Station 2: Number formation practice
- Station 3: Place value games
- Station 4: Teacher-guided intensive support

## Assessment Strategies

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**Formative Assessment:**

- Observation checklists during activities
- Mini-whiteboard responses for quick checks
- Verbal responses during discussions
- Self-assessment using traffic light cards
- Peer assessment during partner work

**Success Criteria:**

- Can count reliably to 20 and beyond
- Recognizes numbers in different representations
- Uses mathematical vocabulary accurately
- Demonstrates understanding of place value

**Recording Methods:**

- Digital photos of practical work
- Annotated work samples
- Individual progress tracking sheets
- Group achievement records

## Behavior Management Strategies

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**Positive Reinforcement:**

- Number Explorer certificates
- Place Value Champion badges
- Group reward system for collaboration
- Individual progress celebration

**Support Strategies:**

- Clear visual timetable
- Structured transition signals
- Calm-down corner with number activities
- Partner support system

## Extension and Support Planning

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**Extension Activities:**

- Independent investigations with larger numbers
- Creating number stories and problems
- Leading small group activities
- Extended problem-solving challenges

**Support Activities:**

- Additional concrete resources
- Simplified recording methods
- Step-by-step task cards
- Adult-supported small groups

**Home Learning Links:**

- Family number games suggestions
- Everyday counting opportunities
- Online learning resources
- Parent information sheets

## Reflection and Next Steps

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**Teacher Reflection Points:**

- Effectiveness of teaching strategies
- Student engagement levels
- Achievement of learning objectives
- Areas for modification

**Next Lesson Planning:**

- Build on successful strategies
- Address identified misconceptions
- Incorporate student interests
- Adjust pace and challenge levels