

Year Level: Foundation/Reception
Subject Area: Mathematics
Topic: Numbers and Place Value

Duration: Term-length Unit
Support Level: SEN-inclusive
Resources Required: Base-10 blocks, number cards

Learning Objectives

- Confidently count and recognize numbers up to 100
- Understand and apply place value concepts (tens and ones)
- Develop counting skills forwards and backwards
- Connect numbers to real-world applications
- Build foundation for basic addition and subtraction

Core Concepts Introduction

This comprehensive unit introduces young learners to fundamental number concepts through engaging, multi-sensory approaches. The content is structured to support diverse learning needs while maintaining high expectations for all students.

Key Teaching Approaches:

- Visual Learning: Using Base-10 blocks and place value charts
- Kinesthetic Activities: Movement-based number learning
- Auditory Support: Number rhymes and counting songs
- Tactile Experiences: Hands-on manipulation of concrete materials

Place Value Understanding

The Place Value Village Concept

Introduction of two distinct "houses" for numbers:

- **Tens House:** Where groups of ten live (blue house)
 - Understanding that each tenant represents 10 units
 - Practicing counting by tens (10, 20, 30...)
- **Ones House:** Where individual numbers live (green house)
 - Recognition of single units
 - Counting individual items

Number Building Activities

Structured activities for reinforcing place value:

- Base-10 block manipulation
- Number sorting exercises
- Place value charts
- Trading games (ten ones for one ten)

Physical Learning Approaches

Movement-Based Number Activities:

- Giant Number Line Walking
 - Forward steps for counting up
 - Backward steps for counting down
 - Big jumps for tens, small jumps for ones
- Number Formation Through Movement
 - Using whole body to create number shapes
 - Group formations for larger numbers

Assessment and Progress Monitoring

Formative Assessment Strategies

- Daily Observation Checkpoints
 - Number recognition fluency
 - Place value understanding
 - Counting accuracy
- Interactive Assessment Activities
 - Number building challenges
 - Place value sorting games
 - Verbal number sequences

Progress Tracking Tools

- Individual Progress Charts
- Achievement Certificates
- Skills Mastery Checklist
- Parent Communication Log

SEN Support Strategies

Differentiation Approaches:

- Visual Supports
 - Color-coded number cards
 - Place value charts with pictures
 - Number formation guides
- Multi-sensory Learning Tools
 - Tactile number cards
 - Sound-associated number learning
 - Movement-based activities
- Scaffolded Learning Steps
 - Break down tasks into smaller steps
 - Progressive difficulty levels
 - Individual learning paths

Cross-Curricular Integration

Literacy Connections

- Number-themed Storybooks
 - "Ten Little Ladybugs"
 - "One is a Snail, Ten is a Crab"
 - "How Many Legs?"
- Writing Activities
 - Number formation practice
 - Simple number stories
 - Mathematical vocabulary development

Creative Arts Integration

- Art Projects
 - Number collages
 - Counting-based artwork
 - Place value pictures
- Music and Movement
 - Counting songs
 - Number rhymes
 - Mathematical dance patterns

Technology Integration

Digital Learning Tools:

- Interactive Whiteboard Activities
 - Digital number games
 - Virtual manipulatives
 - Online counting exercises
- Educational Apps
 - Number recognition apps
 - Place value games
 - Digital counting tools

Home Learning Support

Parent Partnership Activities

- Daily Life Mathematics
 - Shopping activities
 - Cooking and measuring
 - House number recognition
- Take-Home Resources
 - Number cards and games
 - Place value practice sheets
 - Interactive homework activities

Communication Tools

- Weekly Updates
 - Current learning focus
 - Upcoming concepts
 - Success celebrations
- Support Resources
 - Online tutorials
 - Parent guidance sheets
 - Progress reports

Extension Activities

Challenge Opportunities:

- Advanced Number Work
 - Higher number ranges
 - Complex patterns
 - Problem-solving tasks
- Enrichment Projects
 - Number investigation tasks
 - Mathematical challenges
 - Creative number applications