



Teaching Script: Two-Digit Multiplication Magic

Topic: Two-Digit Multiplication

Grade Level: Year 3 (Ages 7-8)

Duration: 60 minutes

Prior Knowledge Required: Basic multiplication facts, place value understanding

Key Vocabulary: multiply, tens, ones, column method, product, factor

Learning Objectives:

- Confidently multiply 2-digit numbers by 2 using the column method
- Understand place value in multiplication
- Apply multiplication strategies to real-world problems

✓ Base-10 blocks (15 sets)

✓ Mini whiteboards (30)

✓ Place value charts

✓ Success criteria cards

✓ Tambourine

✓ Differentiated worksheets

✓ Visual aids

✓ Exit tickets

Pre-Lesson Setup (Before Students Arrive)

Room Organization:

- Arrange desks in groups of 4 for collaborative work
- Set up resource station with manipulatives
- Display success criteria prominently
- Prepare differentiated workstations
- Test interactive whiteboard presentations

Anticipated Misconceptions:

- Forgetting to align digits correctly in columns
- Multiplying tens digit first instead of ones
- Confusion with place value when recording answers

- Difficulty with regrouping in multiplication

Lesson Introduction (Minutes 0-10)

0-5 minutes

"Good morning mathematicians! Let's warm up our multiplication minds with a fun rhythm game!"

[Stand in circle, demonstrate rhythm pattern] - Clap, clap, number - Start with counting in 2s - Increase tempo gradually

Support Strategies:

- Lower: Visual number line support
- Middle: Independent counting
- Higher: Lead small groups, create rhythms

5-10 minutes

"Now, we're going to become multiplication experts with a special method. Watch carefully as I show you the magic of column multiplication!"

Introduction Demo:

- Display 23×2 on board
- Use red for tens (20×2)
- Use blue for ones (3×2)
- Show vertical alignment importance

Core Learning Phase (Minutes 10-25)

10-15 minutes

"Let's solve this step by step together. I'll show you my thinking process."

Modeled Example: 24×2

1. Position numbers vertically:

$$\begin{array}{r} 24 \\ \times 2 \\ \hline \end{array}$$

2. Start with ones: " $4 \times 2 = 8$ "
3. Move to tens: " $20 \times 2 = 40$ "
4. Combine: " $40 + 8 = 48$ "

[Use base-10 blocks to demonstrate each step physically] - Show 24 using 2 tens rods and 4 ones cubes - Demonstrate doubling physically - Match physical model to written method

Guided Practice (Minutes 15-25)

15-20 minutes

"Now it's your turn to be the teacher! Work with your partner to solve these problems."

Partner Work Structure:

- Partner A explains steps while solving
- Partner B checks and questions
- Switch roles for next problem
- Both record in math journals

Differentiated Problems:

Lower Ability	Middle Ability	Higher Ability
12×2	34×2	56×2
14×2	45×2	78×2

Circulation Focus:

- Check digit alignment
- Listen for clear explanations
- Support struggling pairs
- Challenge quick finishers

Independent Application (Minutes 25-40)

25-30 minutes

"Show me what you know! Let's solve some problems independently."

[Distribute differentiated task cards] - Color-coded by difficulty - Include self-check solutions - Provide extension challenges

Challenge Activities:

- Create word problems for peers
- Find patterns in products
- Investigate multiplication with 3
- Design multiplication games

Support Strategies:

- Provide number lines
- Allow use of manipulatives
- Partner support system
- Visual step-by-step guides

Mini-Plenary Discussion (Minutes 40-45)

40-42 minutes

"Let's pause and share our multiplication discoveries. What patterns have you noticed?"

Key Questions:

- What happens when we multiply by 2?
- How does place value help us?
- Which strategy worked best for you?
- Where might we use this in real life?

Look For:

- Understanding of doubling concept
- Clear mathematical vocabulary
- Confidence in explanation
- Application to real contexts

Real-World Application (Minutes 45-50)

"Now we're going to be shopkeepers and customers using our multiplication skills!"

Shopping Scenario Setup:

- Create price lists with two-digit numbers
- Students calculate costs for buying pairs of items
- Use play money for concrete understanding
- Record calculations in shopping journals

Support Group

- Simple price list
- Calculator available
- Visual supports

Core Group

- Mixed prices
- Independent work
- Self-checking

Extension Group

- Complex scenarios
- Multiple items
- Create own problems

Assessment and Reflection (Minutes 50-55)

50-52 minutes

"Let's check what we've learned today with our special exit ticket challenge!"

Three-Level Exit Task:

1. Solve: $34 \times 2 = \underline{\quad}$
2. Explain your method using mathematical vocabulary
3. Create a word problem using two-digit multiplication

Traffic Light Reflection:

- Green: I can teach this to someone else
- Yellow: I can do this independently
- Red: I need more practice

Quick Assessment Strategies:

- Collect exit tickets for analysis
- Note students needing support
- Identify misconceptions
- Plan follow-up interventions

Lesson Closure (Minutes 55-60)

55-60 minutes

"Let's celebrate our multiplication success! Who would like to share something they're proud of learning today?"

Closing Activities:

- Share success stories
- Review learning objectives
- Preview next lesson
- Celebrate achievements

Home Learning Task:

- Practice worksheet (differentiated)
- Online multiplication games
- Real-life multiplication hunt
- Math journal reflection

Extension Activities and Resources

Online Learning Tools:

- Times Tables Rockstars
- Mathletics Multiplication Units
- Interactive Whiteboard Resources
- Educational Math Games

Hands-on Materials:

- Multiplication card games
- Base-10 block activities
- Place value charts
- Number fans and whiteboards

Challenge Activities:

Problem Solving

- Word problems
- Logic puzzles
- Real-world scenarios

Investigation

- Pattern finding
- Number relationships
- Mathematical rules

Creative Tasks

- Math stories
- Game design
- Visual representations

Assessment for Learning Strategies

During Lesson:

- Strategic questioning
- Observation notes
- Mini-whiteboard responses
- Partner discussions

Work Samples:

- Exit tickets
- Workbook examples
- Problem-solving attempts
- Self-assessments

Feedback Methods:

- Verbal immediate feedback

- Written comments
- Peer assessment
- Group reflection

Additional Support and Intervention

Support Mechanisms:

- Small group instruction
- One-to-one support
- Modified resources
- Additional practice time

Scaffolding Methods:

Visual Supports

- Number lines
- Place value charts
- Step-by-step guides

Concrete Materials

- Counting objects
- Base-10 blocks
- Manipulatives

Language Support

- Word banks
- Sentence stems
- Visual dictionaries

Challenge Support:

- Open-ended investigations
- Problem-solving challenges
- Peer tutoring opportunities
- Advanced concept exploration

40-50 minutes

"Let's share our learning and celebrate our multiplication success!"

Exit Ticket Tasks:

1. Solve: $45 \times 2 = \underline{\quad}$
2. Explain your method to a partner
3. Write one thing you found challenging
4. Write one thing you're proud of

Class Discussion Points:

- What patterns did we notice?
- Which strategy worked best?
- How can we check our answers?
- Where might we use this in real life?

Home Learning:

- Practice worksheet (differentiated)
- Online multiplication games
- Create a multiplication poster

Follow-up Lesson Planning:

- Review exit ticket responses
- Adjust groupings based on performance
- Prepare intervention activities
- Plan extension challenges