

**First Prompt:** Write a lesson plan for fourth grade math

ChatGPT

Certainly! Here's a lesson plan for a fourth-grade math class focused on teaching students about multiplication and division:

**Lesson Title:** Multiplication and Division Basics

**Grade:** 4th Grade

**Duration:** 45 minutes

**Objective:** By the end of this lesson, students will be able to:

1. Understand the concept of multiplication as repeated addition.
2. Understand the concept of division as sharing or grouping.
3. Solve basic multiplication and division problems.

**Materials:**

1. Whiteboard and markers
2. Multiplication and division flashcards
3. Math manipulatives (e.g., counters, cubes, or beans)
4. Worksheets with multiplication and division problems
5. Pencils and erasers
6. Chalk or chart paper (optional)

**Procedure:**

**Introduction (10 minutes):**

1. Begin the lesson by reviewing addition and subtraction concepts briefly.
2. Explain that today, we will learn about two new operations: multiplication and division.
3. Write the terms "multiplication" and "division" on the board and ask if anyone knows what they mean. Encourage student responses.

**Multiplication as Repeated Addition (10 minutes):** 4. Use the whiteboard to demonstrate multiplication as repeated addition. For example, show  $3 \times 4$  as  $4 + 4 + 4$  and explain that it means adding 4 three times.

5. Give a few more examples and encourage students to come up to the board and write multiplication expressions as repeated addition.
6. Distribute multiplication flashcards and have students practice using them with a partner, explaining the concept of multiplication as they go.

**Division as Sharing or Grouping (10 minutes):** 7. Explain division as sharing or grouping. For example, show  $12 \div 3$  as sharing 12 items equally among 3 people, resulting in 4 items each.

8. Provide more examples and have students come up to the board to write division expressions as sharing or grouping.
9. Distribute division flashcards and have students practice using them with a partner, explaining the concept of division.

**Guided Practice (5 minutes):** 10. Give each student a set of math manipulatives (e.g., 24 counters) and a worksheet with multiplication and division problems.

11. Work through a few problems as a class, using manipulatives to help solve them. Emphasize the connection between multiplication and division.

**Independent Practice (5 minutes):** 12. Have students work individually or in pairs to complete the remaining problems on their worksheets. Circulate the room to provide assistance as needed.

**Conclusion (5 minutes):** 13. Review the key points of the lesson: multiplication as repeated addition and division as sharing or grouping.

14. Invite students to share any interesting discoveries or insights they had during the lesson.
15. Assign homework or additional practice problems for reinforcement.

**Assessment:**

- Assess students' understanding through their participation in class discussions, their ability to correctly solve problems during guided and independent practice, and their performance on homework assignments.

**Differentiation:**

- For advanced students, introduce more complex multiplication and division problems.
- Provide additional support and one-on-one assistance for struggling students.
- Use visual aids, such as drawings or diagrams, to help students visualize multiplication and division concepts.

**Extension Activity (Optional):** Create a multiplication and division word problem activity where students have to write and solve their own word problems using the concepts they learned in class. This can promote critical thinking and application of their math skills.

## Top 6 Questions for Schools to Ask GenAI Edtech Companies

### AI Capabilities and Limitations

Q1

We know that GenAI is a new technology with extensive limitations. How does your product indicate when it's uncertain or requires human review? What controls do you have in place to identify and lower hallucinations?

### Mitigating Bias

Q2

It's important that the tools we use do not cause harm to our students or teachers. What steps are you taking to identify and mitigate biases in your AI models? How will you ensure fair and unbiased outputs?

### Student Privacy and Ethical Data Use

Q3

Protecting student data privacy and ensuring ethical use of data is a top priority for our school. What policies and safeguards can you share to address these concerns?

### Human Oversight and Quality Control

Q4

Our educators need to validate and trust AI-generated content before use. What human oversight and quality control measures do you use? How do you ensure feedback from teachers/students is being collected and actioned?

### Evidence of Impact

Q5

We need evidence that your AI tool will improve learning outcomes for our student population and/or effectively support our teachers. Can you provide examples, metrics and/or case studies of positive impact in similar settings?

### Accessibility and Inclusive Design

Q6

Our school needs to accommodate diverse learners and varying technical skills among staff. How does your tool ensure accessibility and usability for all our students and staff? What PD is available?