**Lesson TEMPLATE**

**Grade: 4**

**Topic: 20**

**Lesson: 4**

| EXMFE.G4.T20.L4.EN\_section\_1\_title | Lesson 20-4 |
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| EXMFE.G4.T20.L4.EN\_section\_1\_titleStyling | H1 |
| EXMFE.G4.T20.L4.EN\_section\_1\_text |  |
| EXMFE.G4.T20.L4.EN\_section\_1\_collapsible | false |
| EXMFE.G4.T20.L4.EN\_section\_1\_sub\_1\_title | Solving Multiplication Problems |
| EXMFE.G4.T20.L4.EN\_section\_1\_sub\_1\_standards | 4.OA.A.2; 4.OA.A.3; 4.NBT.B.5; MP.1; MP.2 |
| EXMFE.G4.T20.L4.EN\_section\_1\_sub\_1\_lessonObj | 4.OA.A.2 |
| EXMFE.G4.T20.L4.EN \_section\_1\_sub\_1\_columns | 1 |
| EXMFE.G4.T20.L4.EN \_section\_1\_sub\_1\_text | For more help with this lesson, view the Solving Multiplication Problems video. |

| EXMFE.G4.T20.L4.EN\_section\_2\_title | SUM IT UP |
| --- | --- |
| EXMFE.G4.T20.L4.EN\_section\_2\_titleStyling | H2 |
| EXMFE.G4.T20.L4.EN\_section\_2\_text | Dear parent or guardian:  This is a summary of the key ideas in this lesson. It can be used to support students’ learning. |
| EXMFE.G4.T20.L4.EN\_section\_2\_collapsible | true |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_1\_title | RECOGNIZING MULTIPLICATION SITUATIONS |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_1\_columns | 1 |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_1\_text | You can use multiplication to solve problems that involve the following types of situations.  **Equal Groups** You multiply the number of groups by the number in each group to figure out the total, or product.  For example, 3 groups with 4 items in each group is 3 × 4 = 12 items altogether.  Icon, bubble chart  Description automatically generated  **A Comparison** You can think of a comparison situation as an equal-groups situation.  For example, if your friend has 4 books and you have 3 times as many, you have 3 × 4 books = 12 books.  A stack of books  Description automatically generated with medium confidence  **The Area of a Rectangle** You multiply the length and width to figure out the area, or product.  You can also think of a rectangle as an equal-groups situation.  Graphical user interface  Description automatically generated with low confidence |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_2\_title | CREATING MULTIPLICATION PROBLEMS |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_2\_columns | 1 |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_2\_text | You can use what you know about multiplication situations to create different problems for the same multiplication expression.  For example, each problem below can be solved by multiplying 22 × 12 = 264.  What is the area of a rectangular piece of fabric that is 12 cm by 22 cm?  Text  Description automatically generated with low confidence  12 × 22  = 264 square inches  How many eggs are there in 22 standard egg cartons?    22 × 12 eggs = 264 eggs  River gets $12 in allowance. His brother earns 22 times as much at his part-time job. How much does his brother earn?    22 × $12 = $264 |

| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_3\_title | CREATING MULTISTEP PROBLEMS |
| --- | --- |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_3\_columns | H2 |
| EXMFE.G4.T20.L4.EN\_section\_2\_sub\_3\_text | Often mathematics is used to solve problems that involve a number of different steps.  For example, to figure out how much more Erica needs if she has earned $35 a week for the last 15 weeks but is saving up for something that costs about $700, you would multiply 35 × 15 and subtract that amount from 700. |
| EXMFE.G4.T20.L4.EN\_section\_2\_collapsible | true |

| EXMFE.G4.T20.L4.EN\_section\_3\_title | NOTES |
| --- | --- |
| EXMFE.G4.T20.L4.EN\_section\_3\_titleStyling | H2 |
| EXMFE.G4.T20.L4.EN\_section\_3\_text | Multiplication expressions are usually described the following ways for consistency, although mathematically both 12 × 26 and 26 × 12 are correct.  For equal-group situations:  12 groups of 26 would be written as 12 × 26.  For comparison situations:  12 times as many as 26 would be written as 12 × 26.  Rather than just asking students to recognize and solve problem situations that involve multiplication, it is also useful to have them create problem situations involving multiplication. This provides insight into what students think multiplication is all about. |
| EXMFE.G4.T20.L4.EN\_section\_3\_collapsible | true |

| EXMFE.G4.T20.L4.EN\_section\_4\_title | DEFINITIONS |
| --- | --- |
| EXMFE.G4.T20.L4.EN\_section\_4\_titleStyling | H2 |
| EXMFE.G4.T20.L4.EN\_section\_4\_text | **area:** the amount of space in a 2-D shape; the number of 2-D units that cover a space; for example, a rectangle that is 2 units by 3 units has an area of 6 square units  **factor:** one of the numbers you multiply in a multiplication equation; for example, in 2 × 5 = 10, 2 and 5 are factors  **product:** the result of multiplying; for example, in 3 × 4 = 12, 12 is the product |
| EXMFE.G4.T20.L4.EN\_section\_4\_collapsible | true |