

Tack Model 1a	<b>Prompt Fostures:</b> The student is prompted to solve a
TASK MODELTA	contextual problem involving multiplicative comparison
Bosnonso Tyrnol	contextual problem involving multiplicative comparison.
Response Type:	Stimulus Cuidelines
Equation/Numeric	Sumulus Guidelines:
DOK Lovel 1	<ul> <li>Numbers should fit in the parameters of up to 4-digit by</li> <li>digit on 2 digit by 2 digit multiplication problems, and</li> </ul>
DOK LEVEL I	1-aigit, or 2-aigit by 2-aigit multiplication problems, and
4 0 4 4 2	up to 4-aigit aivided by 1-aigit aivision problems.
4.0A.A.2	<ul> <li>All quantities should be whole numbers.</li> </ul>
Multiply or divide to solve	Problems may involve measurements, limited to non-
word problems involving	conversion items, using
multiplicative	<ul> <li>kilometers (km), meters (m), centimeters (cm);</li> </ul>
comparison, e.g., by	<ul> <li>kilograms (kg), grams (g);</li> </ul>
using drawings and	<ul> <li>pounds (Ib), ounces (oz);</li> </ul>
equations with a symbol	<ul> <li>liters (L), milliliters (mL);</li> </ul>
for the unknown number	<ul> <li>hours (hr), minutes (min), seconds (s);</li> </ul>
to represent the	<ul> <li>money (whole number \$ or ¢ only);</li> </ul>
problem, distinguishing	<ul> <li>yards (yd), feet (ft), inches (in); or</li> </ul>
multiplicative comparison	• gallons (gal), quarts (qt), pints (pt), or cups.
from additive	Item difficulty can be adjusted via these example
comparison.	methods:
	<ul> <li>Using multiplication facts in the context</li> </ul>
Evidence Required:	<ul> <li>Using non-math facts in the context</li> </ul>
1. The student solves	
contextual problems	
involving multiplicative	<b>Stimulus:</b> The student is presented with a contextual problem
comparisons, e.g., by	involving multiplicative comparison with an unknown product.
using drawings and	
equations with a symbol	<b>Example Stem:</b> A cat has 4 times as many toys as a puppy.
for the unknown number	The puppy has 12 toys. How many toys does the cat have?
to represent the	
problem.	Enter your answer in the response box.
	<b>Declaring (1 weight)</b> The student and the set
Ioois: None	<b>Rubric:</b> (1 point) The student solves for an unknown and enters
	the correct number (e.g., 48).
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	<b>kesponse Type:</b> Equation/Numeric

## Grade 4 Mathematics Item Specification C1 TA



Task Model 1b-c	<b>Prompt Features:</b> The student is prompted to solve a contextual problem involving multiplicative comparison.
Response Type:	
Equation/Numeric	Stimulus Guidelines: Same as for TM1a.
DOK Lovel 2	
DOK LEVELZ	
	IMID
4.0A.A.2	<b>Stimulus:</b> The student is presented with a contextual problem
Multiply or divide to solve	involving multiplicative comparison with an unknown factor. The
word problems involving	unknown is a quantity of objects or measurement quantity.
multiplicative	
comparison e.g. by	<b>Example Stem:</b> A cat has 2 times as many toys as a puppy
using drawings and	The cat has 10 toys. How many toys does the numpy have?
agustions with a symbol	
equations with a symbol	
for the unknown number	Enter your answer in the response box.
to represent the	
problem, distinguishing	
multiplicative comparison	TM1c
from additive	<b>Stimulus:</b> The student is presented with a contextual problem
comparison.	involving multiplicative comparison that solves for an unknown
	factor. The unknown is the multiplier that describes how many
Evidence Required:	times more one quantity is than the other.
1 The student solves	
contextual problems	<b>Example Stem:</b> losh and Aaron are collecting shells at the
involving multiplicativo	basch Josh collects 0 shalls and Aaron collects 26 shalls. How
	many times more shalls does Asyan collects than losh?
companisons, e.g., by	
using drawings and	
equations with a symbol	Enter your answer in the response box.
for the unknown number	
to represent the	
problem.	<b>Rubric:</b> (1 point) The student solves for an unknown and enters
	the correct number (e.g., 5; 4).
Tools: None	
	Response Type: Equation/Numeric
Version 3 undate:	
Poplaced example stem	
in TM1 a to undate	
IN IMIC to update	
context.	

## Grade 4 Mathematics Item Specification C1 TA



Task Model 2	<b>Prompt Features:</b> The student is prompted solve
rusk riduer 2	straightforward word problems using the four operations
Decrease Tyrney	straightforward word problems using the four operations.
Response Type:	Stimulus Cuidelines
Equation/Numeric	Stimulus Guidelines:
	• Numbers should fit in the parameters of up to 4-digit by
DOK Level 2	1-digit, or 2-digit by 2-digit, multiplication problems.
	All quantities should be whole numbers.
4.0A.A	<ul> <li>Problems may involve measurements, limited to non-</li> </ul>
Use the four operations	conversion items, using
with whole numbers to	<ul> <li>kilometers (km), meters (m), centimeters (cm);</li> </ul>
solve problems.	$\circ$ kilograms (kg), grams (g);
	<ul> <li>pounds (lb), ounces (oz);</li> </ul>
Evidence Required:	<ul> <li>liters (L), milliliters (mL);</li> </ul>
2. The student solves	<ul> <li>hours (hr), minutes (min), seconds (s);</li> </ul>
straightforward,	<ul> <li>money (whole number \$ or ¢ only);</li> </ul>
contextual problems	<ul> <li>yards (yd), feet (ft), inches (in); or</li> </ul>
using the four	<ul> <li>gallons (gal), guarts (gt), pints (pt), or cups.</li> </ul>
operations.	Item difficulty can be adjusted via these example
	methods:
Tools: None	<ul> <li>Using numbers less than 100</li> </ul>
	<ul> <li>Using numbers greater than 100, but less than</li> </ul>
	1.000
	$\circ$ Using numbers greater than 1.000, but less than
	1.000.000 (for addition and subtraction only)
	тм2
	<b>Stimulus:</b> The student is presented with a contextual problem
	using any of the four operations
	asing any or the rour operations.
	Example Stem 1: Tanya ran 400 meters on Tuesday. She ran
	200 motors on Wednesday, What is the total number of motors
	Tonyo ran these two dows?
	Tanya ran these two days?
	Evenuela Stem 2: A container halds 750 milliliters of water
	<b>Example Stem 2:</b> A container holds 750 milliliters of water.
	Jess drank 90 milliliters of the water. How many milliliters of
	water remain in the container?
	<b>Rubric:</b> (1 point) The student correctly solves the word problem
	(e.g., 1200; 660).
	Response Type: Equation/Numeric