


NUMBER ROD REASONING

MULTIPLICATION & DIVISION

SHELLEY GRAY

Think and Reason 8

Make a train with two blue rods.




Find two different single-color train trains. Write an equation for each.

Number Rod Reasoning: Multiplication & Division

Think and Reason 4


How many red rods can an orange rod be divided into?



Number Rod Reasoning: Multiplication & Division

Think and Reason 3

Make a train with 3 purple rods. What is its value?



Write an addition equation and a multiplication equation to match your train.

Gray



20
TASKS

DIGITAL & PRINTABLE

Ready to go beyond simple answer-getting?

In these Number Rod Reasoning Tasks for multiplication and division, students will represent and justify their thinking, making them ideal for building conceptual understanding and mathematical flexibility.




**DEEP
THINKING**

Use them in small groups,
whole class, or
intervention settings to
encourage productive
struggle and
mathematical discussions.

**LOW FLOOR
HIGH CEILING**

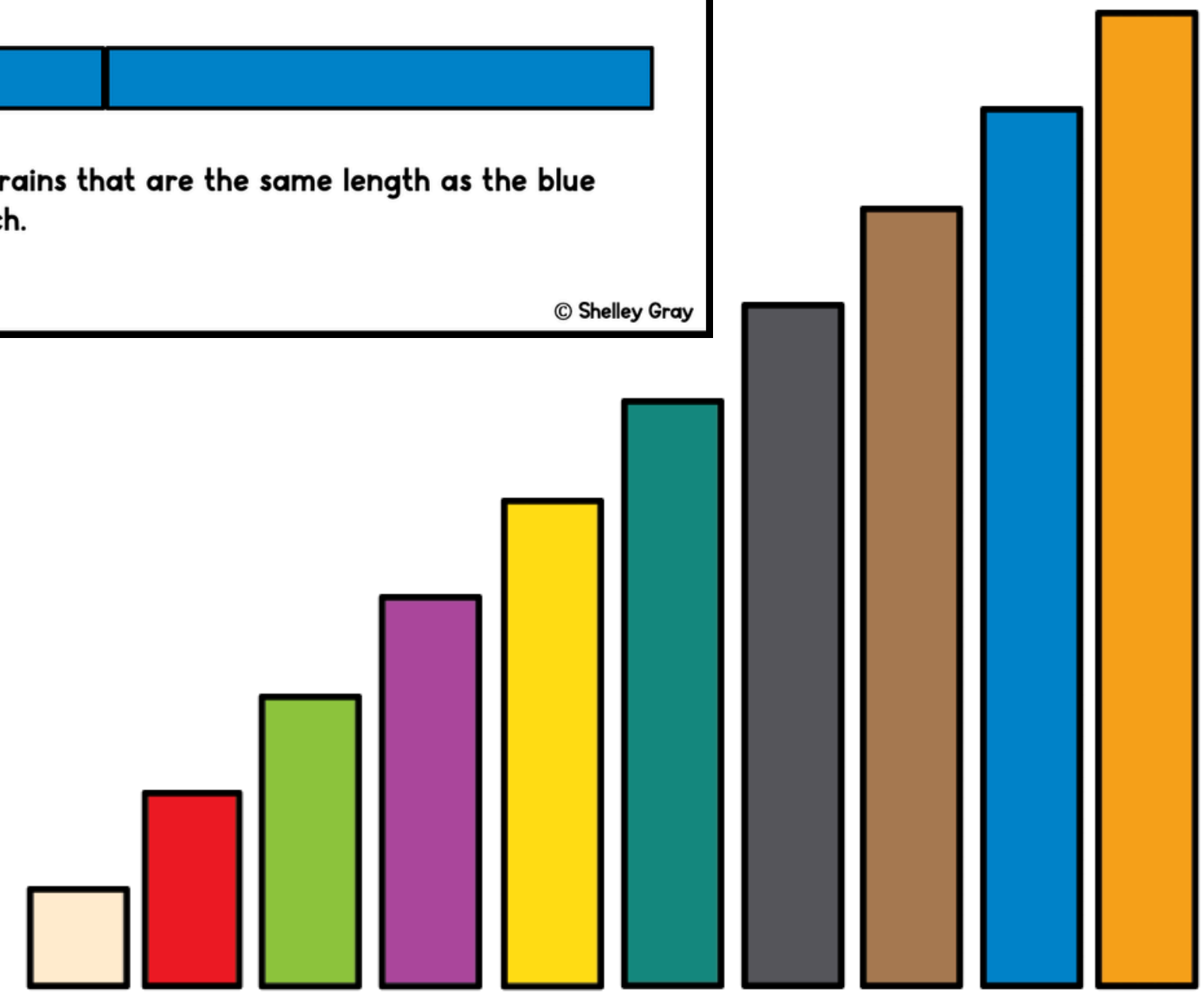
Think and Reason 8

Make a train with two blue rods.



Find two different single-color trains that are the same length as the blue train. Write an equation for each.

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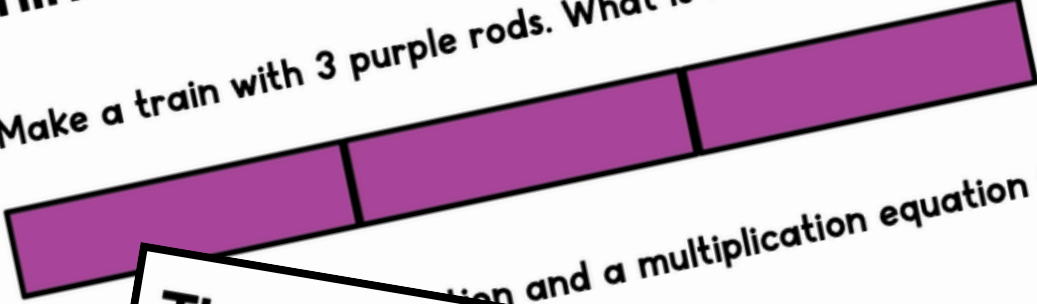
This resource includes twenty tasks, designed to promote **deep thinking** and **reasoning** with number rod manipulatives.

The hands on nature of these activities will help students make important connections between **concrete** and **abstract**.

3

Think and Reason

Make a train with 3 purple rods. What is its value?




Write a division equation and a multiplication equation to match your model.

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4

Think and Reason

How many red rods can an orange rod be divided into?



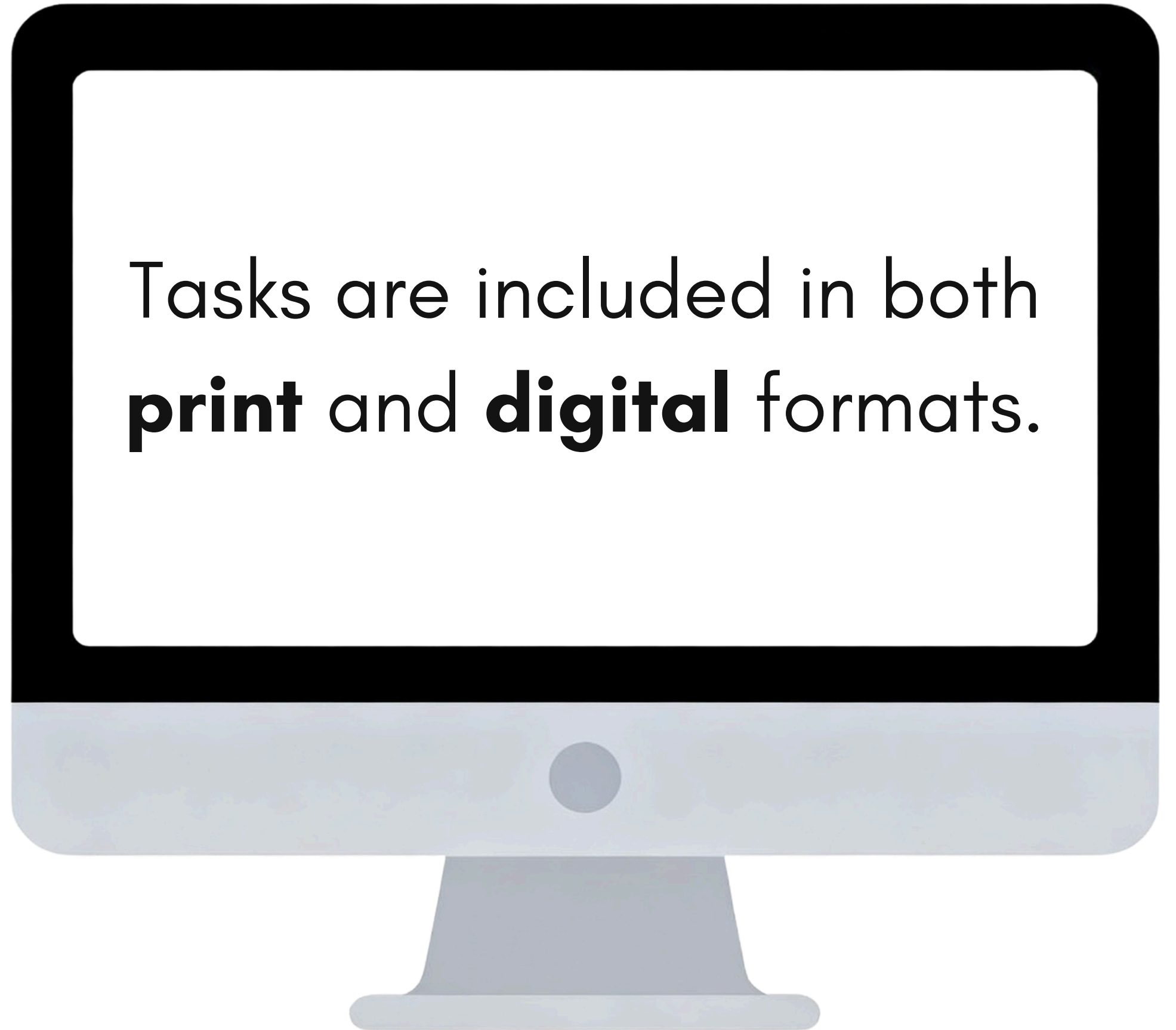
Write a division equation and a multiplication equation to match your model.

Number Rod Reasoning: Multiplication & Division

**HANDS-ON
LEARNING**


**MAKE
REASONING A
DAILY
ROUTINE**

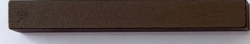
Tasks are included in both
print and **digital** formats.




If it's your first time using number rods, or if you need additional support, I've provided photo examples of each task.

**BUILDS
FLEXIBLE
THINKING!**

6  = 10


 40 ← The brown is 40 because it's 4 times as long.


 40

$4 \times 10 = 40$


OR


$10 + 10 + 10 + 10 = 40$


5  $10 \times 3 = 30$




OR

 $3 \times 10 = 30$


16  False

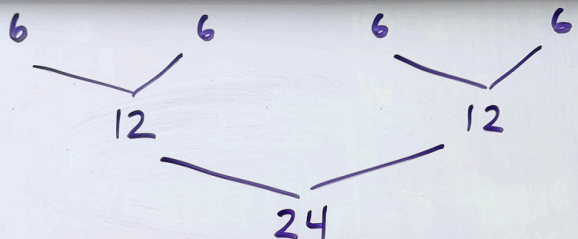
 True


 False

make the false statement true by adding a yellow rod to the white to #3.

12 $4 \times 6 = 24$







$6 \times 4 = 24$

So: $4 \times 6 = 6 \times 4$