



*Stuck? Scan
for the anchor
chart*

WHAT DIVISION MEANS • SET 4 • GRADE 3

Rates: The "For Each" Question

Some numbers come glued together: miles WITH hours, dollars WITH pencils. Division pulls out what **ONE** gets.

A bike rider goes

12 miles in 3 hours

divide by the hours ↓

$12 \div 3 = 4$ miles EACH hour

the rate: what one hour gets

4 mi

4 mi

4 mi

hour 1

hour 2

hour 3

Same trip, cut into equal hour-boxes. Every "for each" problem is equal groups wearing a watch.

The magic words to hunt for: **each, per, every one**. When you hear them, division is nearby.

Roots of Reason

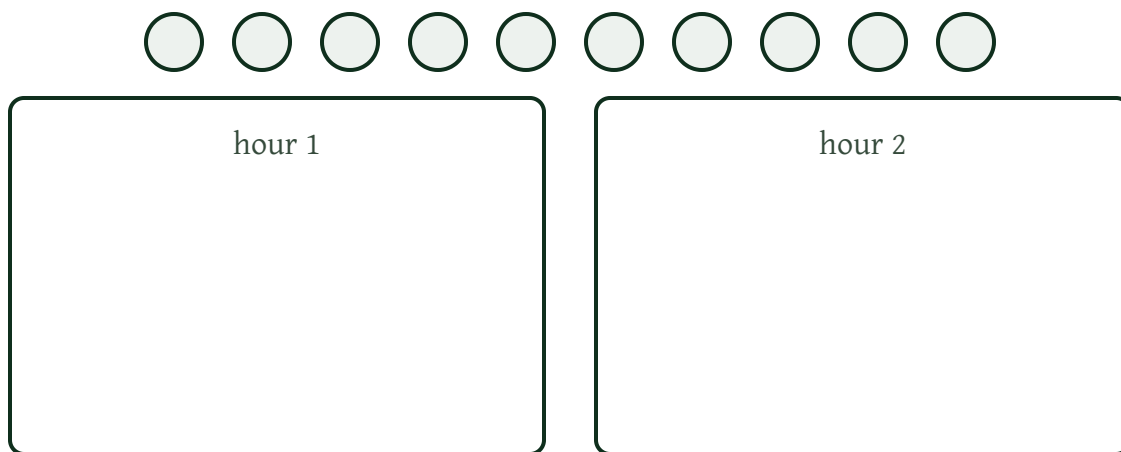
Rates · Set 4

Name _____ Date _____

Fill the Hour Boxes

A steady walker covers **10 blocks in 2 hours**.
Same speed the whole time. How far in **ONE** hour?

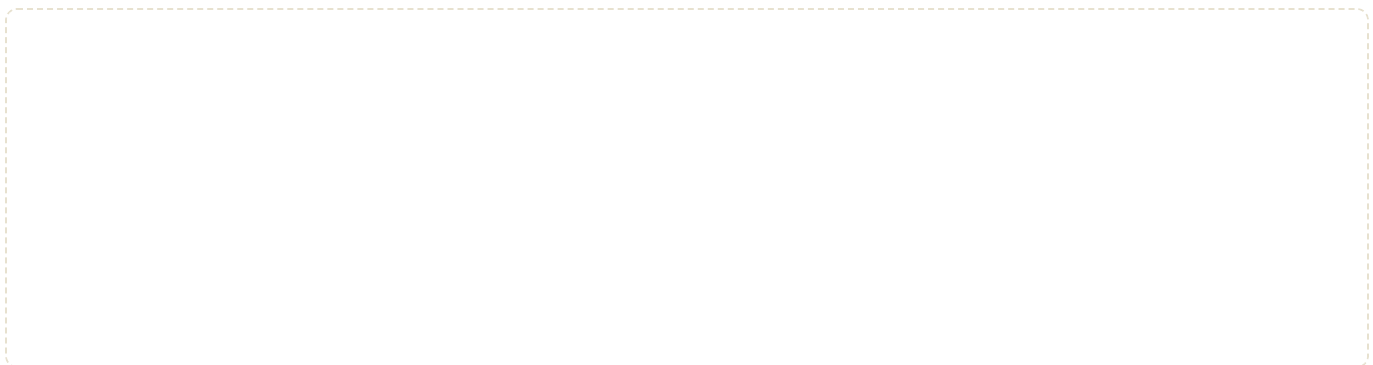
1. Here are the 10 blocks as dots, and the 2 hour boxes. Deal the blocks into the boxes evenly: draw 1 dot in a box, cross one off, repeat.



The diagram shows 10 small circles arranged in a horizontal row above two large rectangular boxes. The left box is labeled "hour 1" and the right box is labeled "hour 2".

$10 \div 2 =$ blocks each hour

2. A bakery oven bakes **12 rolls in 3 batches**, the same number every batch. Draw the batches as boxes yourself this time, deal the rolls in, and finish the sentence.



A large dashed rectangular box intended for the student to draw the batches.

Each batch has rolls. $12 \div 3 =$

Roots of Reason

Rates · Set 4

Name _____ Date _____

The Price for One

Stores sell things in packs. Division tells you what you are really paying **for each one**.

1. A pack of **4 juice boxes costs 8 dollars**. Share the 8 dollar-coins under the 4 juice boxes so every box gets the same. Draw the coins in.



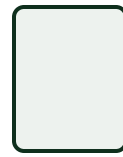
box 1



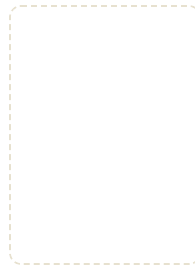
box 2



box 3



box 4



One juice box really costs dollars.

2. **Which deal is better?** Store A: 3 stickers for 6 dollars. Store B: 5 stickers for 5 dollars. Find the price for ONE sticker at each store first. No fair guessing.

Store A: $6 \div 3 =$

each

Store B: $5 \div 5 =$

each

Circle the better deal:

Store A

Store B

Roots of Reason

Rates · Set 4

Name _____ Date _____

Which Number Do I Divide By?

Divide by the thing that comes AFTER the word "each."

"Miles each HOUR" means divide by the hours.

1. A train goes **90 miles in 3 hours**. You want: miles each HOUR.
Circle what to divide by, then solve.

90

3

=

2. A reader finishes **40 pages in 5 days**. You want: pages each DAY.

40

5

=

3. Trickier: a garden hose fills **6 buckets in 30 minutes**. You
want: minutes each BUCKET. Careful which way!

 $30 \div 6$ $6 \div 30$

=

4. Write your own "each" problem for the division fact $18 \div 6 = 3$. Draw a small picture to go with it.

Roots of Reason

Rates · Set 4

Name _____ Date _____

Rate Hunt

Rates hide on price tags, cereal boxes, speed signs,
and game scores. Catch one in the wild.

1. Show your rate: a photo of the tag or sign, or draw what you saw.



Photo of your rate in the wild

or draw it here

2. Tell your rate's story in numbers:

I found _____ for _____ .

So each one is ÷ =

Example: 6 granola bars for 12 dollars. Each bar is $12 \div 6 = 2$ dollars.



WHAT DIVISION MEANS · SET 4 · GRADE 3

Answer Key and Teacher Notes

Fill the Hour Boxes (page 2)

1. $10 \div 2 = 5$ blocks each hour 2. Each batch has 4 rolls; $12 \div 3 = 4$

The Price for One (page 3)

1. 2 dollars per box 2. Store A: 2 each; Store B: 1 each; better deal: *Store B*

Which Number Do I Divide By? (page 4)

1. Divide by 3: $90 \div 3 = 30$ 2. Divide by 5: $40 \div 5 = 8$ 3. $30 \div 6 = 5$ minutes per bucket 4. Any story with 18 things shared over 6 "eaches"

Rate Hunt (page 5)

Answers vary. Check the division runs total $\div$ count, and the units in the answer say "per one": dollars per bar, miles per hour, points per game.

Page 4 problem 3 is the one to watch: "minutes per bucket" flips the division, and students who divide on autopilot will write $6 \div 30$. The fix is not a rule. It is the question "what should ONE bucket get?" asked out loud. If that lands, unit rates in grade 6 arrive on paved road.