LESSON MAKER PRO

Divide in Chunks

Use place-value chunks to find each quotient.

GRADE 4 · 4.NOS.B.6.b

4.NOS.B.6.b "Use strategies based on place value (e.g., partial quotients) to divide."

NAME _____ DATE _____

THE BIG IDEA

Take out a chunk you can easily divide by the divisor, such as a number of hundreds or tens. Divide that chunk, then repeat with what is left. Add the partial quotients to find the answer.

WORKED EXAMPLE

Find 648 ÷ 4 using partial quotients.

1. Take out 400: 400 ÷ 4 = 100, and 648 - 400 = 248.
2. Take out 240: 240 ÷ 4 = 60, and 248 - 240 = 8.
3. Divide what is left: 8 ÷ 4 = 2.

Answer: 100 + 60 + 2 = 162

PRACTICE 6 problems

1 Use partial quotients to find 735 ÷ 5.

ANSWER _____

2 Use partial quotients to find 864 ÷ 6.

ANSWER _____

3 Use partial quotients to find 945 ÷ 7.

ANSWER _____

4 Use partial quotients to find 952 ÷ 8.

ANSWER _____

5 Use partial quotients to find 756 ÷ 9.

ANSWER _____

6 Use partial quotients to find 624 ÷ 3.

ANSWER _____

APPLY IT Show your work

1 Six friends share 528 trading cards equally. How many cards does each friend get? Use partial quotients.

WORK SPACE

ANSWER _____

2 At a school fair, 936 tickets are packed into bundles of 8. How many bundles can be made? Use partial quotients.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Use partial quotients to find 1,764 ÷ 7. Show at least two chunks you divided, then explain how they give the quotient.

WORK SPACE AND ANSWER

ANSWER KEY

Divide in Chunks

GRADE 4 · 4.NOS.B.6.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use partial quotients to find 735 ÷ 5.	**147**
2	Use partial quotients to find 864 ÷ 6.	**144**
3	Use partial quotients to find 945 ÷ 7.	**135**
4	Use partial quotients to find 952 ÷ 8.	**119**
5	Use partial quotients to find 756 ÷ 9.	**84**
6	Use partial quotients to find 624 ÷ 3.	**208**

PART 2 · APPLY IT

1. **88 cards** Divide 528 by 6. For example, 480 ÷ 6 = 80 and 48 ÷ 6 = 8, so each friend gets 88 cards.
2. **117 bundles** Divide 936 by 8. For example, 800 ÷ 8 = 100, 80 ÷ 8 = 10, and 56 ÷ 8 = 7, for a total of 117 bundles.

CHALLENGE

1,400 ÷ 7 = 200, 350 ÷ 7 = 50, and 14 ÷ 7 = 2. The chunks total 1,764, so the quotient is 200 + 50 + 2 = 252.

Accept different chunks if they total the dividend and their partial quotients total the correct answer.