

Whole Piece Puzzle

Build the whole from one equal part.

GRADE 2 • 2.NS.3.c

2.NS.3.c "Compose the whole for a given fractional part and its value (in context) for halves, fourths, eighths, thirds, and sixths (e.g., when given 14, determine how many pieces would be needed to make 44)."

NAME _____

DATE _____

BUILD THE WHOLE

A whole is made of equal parts. If you know how many are in one part, add that number for each equal part in the whole. For example, a whole has 4 fourths.

WORKED EXAMPLE

$\frac{1}{6}$ of a bead bracelet has 5 beads. How many beads are on the whole bracelet?

1. One whole has 6 sixths.
2. Add 5 beads 6 times.
3. $5 + 5 + 5 + 5 + 5 + 5 = 30$.

Answer: 30 beads

PRACTICE 5 problems

- 1** $\frac{1}{2}$ of a basket has 9 apples. How many apples are in the whole basket?

ANSWER _____

- 2** $\frac{1}{4}$ of a crayon pack has 6 crayons. How many crayons are in the whole pack?

ANSWER _____

- 3** $\frac{1}{8}$ of a set of toy blocks has 2 blocks. How many blocks are in the whole set?

ANSWER _____

- 4** $\frac{1}{3}$ of a row of flowers has 7 flowers. How many flowers are in the whole row?

ANSWER _____

- 5** $\frac{1}{6}$ of a sticker page has 4 stickers. How many stickers are on the whole page?

ANSWER _____

APPLY IT Show your work

- 1** At an animal shelter, the cats are in 3 equal rooms. One room, or $\frac{1}{3}$ of all the cats, has 6 cats. How many cats are at the shelter?

WORK SPACE

ANSWER _____

- 2** Eight equal prize bags hold all the trading cards for a class game. One bag, or $\frac{1}{8}$ of all the cards, has 3 cards. How many trading cards are there?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A puzzle is split into 4 equal parts. One part, or $\frac{1}{4}$, has 8 pieces. Kai says the whole puzzle has 24 pieces because $8 + 8 + 8 = 24$. Is Kai correct? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$\frac{1}{2}$ of a basket has 9 apples. How many apples are in the whole basket?	18 apples
2	$\frac{1}{4}$ of a crayon pack has 6 crayons. How many crayons are in the whole pack?	24 crayons
3	$\frac{1}{8}$ of a set of toy blocks has 2 blocks. How many blocks are in the whole set?	16 blocks
4	$\frac{1}{3}$ of a row of flowers has 7 flowers. How many flowers are in the whole row?	21 flowers
5	$\frac{1}{6}$ of a sticker page has 4 stickers. How many stickers are on the whole page?	24 stickers

PART 2 • APPLY IT

1. **18 cats** There are 3 equal rooms with 6 cats in each room. Add $6 + 6 + 6$ to get 18.
2. **24 trading cards** There are 8 equal bags with 3 cards in each bag. Add 3 eight times to get 24.

CHALLENGE

No. A whole has 4 fourths, so $8 + 8 + 8 + 8 = 32$ pieces.

Accept correct totals with or without the named unit. For the challenge, accept explanations that identify 4 equal fourths and a total of 32 pieces.