

Part-Whole Power

Use diagrams to show parts and totals.

GRADE 3 • TEKS 3.1.E

3.1.E "create and use representations to organize, record, and communicate mathematical ideas;"

NAME _____

DATE _____

SHOW THE PARTS

A part-whole diagram shows one total, called the whole, and the smaller parts that make it. Put the parts in separate boxes and the total in the whole box, then add or subtract to find a missing number.

WORKED EXAMPLE

Mia has 36 red beads and 19 blue beads. Use a part-whole diagram to find how many beads she has.

1. Write 36 and 19 as the two parts.
2. Add the parts: $36 + 19 = 55$.
3. Write 55 as the whole.

Answer: 55 beads

PRACTICE 6 problems

- 1** A part-whole diagram has parts 24 and 13.
Write the whole: $24 + 13 = \underline{\hspace{2cm}}$.

ANSWER _____

- 2** A part-whole diagram has a whole of 62
and one part of 28. Find the missing part:
 $62 - 28 = \underline{\hspace{2cm}}$.

ANSWER _____

- 3** Sketch a part-whole diagram for 17 stickers
and 25 stickers. Write the whole.

ANSWER _____

- 4** The whole box says 71. One part box says
46. Find the number in the other part box.

ANSWER _____

- 5** Which addition equation matches a part-
whole diagram with a whole of 83 and parts
of 51 and 32? A. $83 + 32 = 51$ B. $51 + 32 =$
 83 C. $83 - 32 = 51$

ANSWER _____

- 6** Sketch a part-whole diagram whose whole
is 90 and one part is 44. Find the other part.

ANSWER _____

APPLY IT Show your work

- 1** During a video game, Jada earns 27 coins in level 1 and 18 coins in level 2. Sketch a part-whole diagram. How many coins does she earn altogether?

WORK SPACE

ANSWER _____

- 2** An art club has 96 beads. The club uses 47 beads to make bracelets. Sketch a part-whole diagram to show the beads used and the beads left. How many beads are left?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A class library gets 68 new books. There are 14 animal books, 22 science books, and the rest are mystery books. Sketch one whole split into three parts. How many mystery books are there?

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A part-whole diagram has parts 24 and 13. Write the whole: $24 + 13 = \underline{\quad}$.	37
2	A part-whole diagram has a whole of 62 and one part of 28. Find the missing part: $62 - 28 = \underline{\quad}$.	34
3	Sketch a part-whole diagram for 17 stickers and 25 stickers. Write the whole.	42 stickers
4	The whole box says 71. One part box says 46. Find the number in the other part box.	25
5	Which addition equation matches a part-whole diagram with a whole of 83 and parts of 51 and 32? A. $83 + 32 = 51$ B. $51 + 32 = 83$ C. $83 - 32 = 51$	B. $51 + 32 = 83$
6	Sketch a part-whole diagram whose whole is 90 and one part is 44. Find the other part.	46

PART 2 • APPLY IT

1. **45 coins** The parts are 27 and 18, so $27 + 18 = 45$.
2. **49 beads** The whole is 96 and one part is 47, so $96 - 47 = 49$.

CHALLENGE

32 mystery books

For items that ask for a sketch, accept any part-whole model that labels the given parts and whole correctly. Accept an equivalent addition or subtraction equation when it matches the model.