LESSON MAKER PRO

Picture Graph Puzzles

Compare groups using a pictograph key.

GRADE 3 · 3.DA.A.16.b

3.DA.A.16.b "Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled graphs."

NAME _____ DATE _____

READ, THEN COMPARE

In a pictograph, the key tells how many things each symbol stands for. Multiply the number of symbols by the key to find each total. To find how many more or how many fewer, subtract the smaller total from the larger total.

WORKED EXAMPLE

How many more clay charms than paper crowns were made?

Craft Fair

Paper crowns	◆ ◆ ◆
Clay charms	◆ ◆ ◆ ◆ ◆

Key: ◆ = 7 crafts

1. Paper crowns: 3 × 7 = 21
2. Clay charms: 5 × 7 = 35
3. Find the difference: 35 - 21 = 14

Answer: 14 more clay charms

PRACTICE 6 problems

1 How many more scooters than skateboards are shown?

Wheels at the Park

Skateboards	● ● ● ●
Scooters	● ● ● ● ● ● ● ●

Key: ● = 2 rides

ANSWER _____

2 How many fewer robots than dinosaurs are shown?

Toy Shelf

Robots	■ ■
Dinosaurs	■ ■ ■ ■ ■ ■

Key: ■ = 4 toys

ANSWER _____

3 How many more grapes than cherries are shown?

Fruit for Snack

Cherries	● ●
Grapes	● ● ● ●

Key: ● = 6 pieces of fruit

ANSWER _____

4 How many more sunflowers and roses are there together than tulips?

Garden Flowers

Sunflowers	▲ ▲ ▲ ▲ ▲ ▲
Roses	▲ ▲
Tulips	▲ ▲ ▲ ▲

Key: ▲ = 2 flowers

ANSWER _____

5 How many more bears and owls are there together than foxes and deer together?

Animal Stickers

Bears	★ ★ ★ ★ ★ ★ ★ ★
Owls	★ ★ ★ ★
Foxes	★ ★ ★ ★ ★ ★
Deer	★ ★

Key: ★ = 4 stickers

ANSWER _____

6 How many fewer turtles are there than rabbits and foxes together?

Animals in Stories

Turtles	◆ ◆
Rabbits	◆ ◆ ◆ ◆ ◆ ◆
Foxes	◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆

Key: ◆ = 2 stories

ANSWER _____

APPLY IT Show your work

1 Mia, Leo, and Sam won tickets at an arcade. How many more tickets did Mia win than Leo and Sam together?

Arcade Tickets

Mia	★★★★★★★★
Leo	★★★★
Sam	★★

Key: ★ = 4 tickets

ANSWER _____

2 Students brought books to a class book swap. How many fewer mystery and animal books were brought together than comic books?

Book Swap

Comic books	■ ■ ■ ■ ■ ■ ■ ■
Mystery books	■ ■ ■ ■
Animal books	■ ■

Key: ■ = 6 books

ANSWER _____

CHALLENGE One step up

How many more pages did the class read on Saturday and Sunday together than on Thursday and Friday together? Explain your answer using the key.

Class Reading

Thursday	● ● ● ●
Friday	● ●
Saturday	● ● ● ● ● ● ● ● ●
Sunday	● ● ● ● ● ●

Key: ● = 2 pages

WORK SPACE AND ANSWER

ANSWER KEY

Picture Graph Puzzles

GRADE 3 · 3.DA.A.16.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	How many more scooters than skateboards are shown?	**8 more scooters**
2	How many fewer robots than dinosaurs are shown?	**16 fewer robots**
3	How many more grapes than cherries are shown?	**12 more grapes**
4	How many more sunflowers and roses are there together than tulips?	**8 more flowers**
5	How many more bears and owls are there together than foxes and deer together?	**16 more stickers**
6	How many fewer turtles are there than rabbits and foxes together?	**26 fewer stories**

PART 2 · APPLY IT

1. **8 more tickets** Mia won 32 tickets. Leo and Sam won 16 + 8 = 24 tickets together, so 32 - 24 = 8.
2. **12 fewer books** There were 48 comic books and 24 + 12 = 36 mystery and animal books together. The difference is 48 - 36 = 12.

CHALLENGE

18 more pages. Each symbol stands for 2 pages, so Saturday and Sunday total 30 pages and Thursday and Friday total 12 pages; 30 - 12 = 18.

Accept answers with or without the word “more” or “fewer” when the number and unit are correct. For the challenge, accept any explanation that uses the key to find both combined totals and compares them.