LESSON MAKER PRO

Pattern Detectives

Find what changes each time.

GRADE 2 · 2.A.1.1

2.A.1.1 "Represent, create, describe, complete, and extend increasing and decreasing patterns with quantity and numbers in a variety of contexts."

NAME _____ DATE _____

FIND THE CHANGE

In a number pattern, each number may grow or shrink by the same amount. Find that amount, then use it to fill in the blank.

WORKED EXAMPLE

A sticker chart shows 1, 4, 7, 10, ____. How many stickers come next?

1. 4 is 3 more than 1.
2. 7 is 3 more than 4, so the pattern grows by 3.
3. Add 3 to 10 to get 13.

Answer: 13 stickers

PRACTICE 5 problems

1 A shelf holds 6, 12, 18, ___ toy cars in its four bins. How many cars go in the last bin?

ANSWER _____

2 A child counts 28, 24, 20, ___ blocks left while packing. What number comes next?

ANSWER _____

3 A bead box has 15, ___, 21, 24 beads in its four sections. How many beads are in the second section?

ANSWER _____

4 A game shows 35, 30, 25, ___ points after each turn. What score comes next?

ANSWER _____

5 Four jars hold 17, 19, ___, 23 buttons. How many buttons are in the third jar?

ANSWER _____

APPLY IT Show your work

1 Mia uses 14 beads on Monday, 17 on Tuesday, and 20 on Wednesday. She uses the same number more each day. How many beads does she use on Thursday?

WORK SPACE

ANSWER _____

2 At a party, 32 balloons are left after the first hour, 27 after the second, and 22 after the third. The same number pop each hour. How many are left after the fourth hour?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A robot's battery points go 38, 32, ___, 20. What number is missing? Tell how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Pattern Detectives

GRADE 2 · 2.A.1.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A shelf holds 6, 12, 18, ___ toy cars in its four bins. How many cars go in the last bin?	**24 cars**
2	A child counts 28, 24, 20, ___ blocks left while packing. What number comes next?	**16 blocks**
3	A bead box has 15, ___, 21, 24 beads in its four sections. How many beads are in the second section?	**18 beads**
4	A game shows 35, 30, 25, ___ points after each turn. What score comes next?	**20 points**
5	Four jars hold 17, 19, ___, 23 buttons. How many buttons are in the third jar?	**21 buttons**

PART 2 · APPLY IT

1. **23 beads** The number grows by 3 each day. Add 3 to 20.
2. **17 balloons** The number drops by 5 each hour. Subtract 5 from 22.

CHALLENGE

26. The points go down by 6 each time.

Accept the correct number with or without its unit. For the challenge, accept any explanation that shows the pattern decreases by 6 each time.