LESSON MAKER PRO

Patterns at Play

Find the rule and keep it going.

GRADE 2 · 2.OA.D.5

2.OA.D.5 "Reproduce, extend, create, and describe patterns and sequences using a variety of materials."

NAME _____ DATE _____

FIND THE RULE

A growing pattern changes by the same amount each time. Find how many are added, then use that rule to find what comes next.

WORKED EXAMPLE

A box has 21 marbles, then 24, then 27, then 30. How many marbles come next?

1. From 21 to 24, add 3.
2. From 24 to 27, add 3 again.
3. 30 + 3 = 33.

Answer: 33 marbles

PRACTICE 5 problems

1 Toy cars are lined up in groups of 2, 4, and 6. How many cars are in the next group?

ANSWER _____

2 A pet gets 5, 8, and 11 treats on three days. If the pattern keeps going, how many treats come next?

ANSWER _____

3 Three jars hold 6, 10, and 14 shells. If the pattern keeps going, how many shells are in the next jar?

ANSWER _____

4 Make a pattern of four sticker counts. Start with 3 stickers and add 5 each time. Write all four counts.

ANSWER _____

5 Three stacks have 4, 10, and 16 blocks. How many blocks are added each time?

ANSWER _____

APPLY IT Show your work

1 Jada puts stickers on pages. The pages have 1, 4, 7, and 10 stickers. If the pattern keeps going, how many stickers go on the next page?

WORK SPACE

ANSWER _____

2 Noah builds towers with 5, 9, 13, and 17 blocks. How many more blocks are in each new tower?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Lia stacks cups in a growing pattern: 4, 9, ___, 19 cups. What number is missing? Tell how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Patterns at Play

GRADE 2 · 2.OA.D.5

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Toy cars are lined up in groups of 2, 4, and 6. How many cars are in the next group?	**8 cars**
2	A pet gets 5, 8, and 11 treats on three days. If the pattern keeps going, how many treats come next?	**14 treats**
3	Three jars hold 6, 10, and 14 shells. If the pattern keeps going, how many shells are in the next jar?	**18 shells**
4	Make a pattern of four sticker counts. Start with 3 stickers and add 5 each time. Write all four counts.	**3, 8, 13, 18**
5	Three stacks have 4, 10, and 16 blocks. How many blocks are added each time?	**6 blocks**

PART 2 · APPLY IT

1. **13 stickers** Each page has 3 more stickers than the page before it. Add 3 to 10.
2. **4 blocks** Each tower has 4 more blocks than the one before it.

CHALLENGE

14 cups. The counts go up by 5 each time: 9 + 5 = 14 and 14 + 5 = 19.

For the challenge, accept any explanation that shows the counts increase by 5 each time.