

# Pattern Detectives

*Find what comes next.*

**GRADE 2 • 2.PFA.1.a**

**2.PFA.1.a** "Identify and describe repeating and increasing patterns."

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## SPOT THE RULE

A repeating pattern uses the same group again and again.  
An increasing pattern adds the same amount each time.

## WORKED EXAMPLE

Toy cars go blue, green, orange, blue, green, \_\_\_\_\_. What comes next?

1. See the group: blue, green, orange.
2. The same group starts again.
3. After green comes orange.

**Answer: orange**

## PRACTICE 4 problems

- 1** Mia lines up crayons: red, yellow, red, yellow, \_\_\_\_\_. What color comes next?

**ANSWER** \_\_\_\_\_

- 2** A puppy gets 1 treat, then 2, then 3. Next time it gets \_\_\_\_\_ treats.

**ANSWER** \_\_\_\_\_

- 3** A bracelet has star, heart, star, heart. Is the pattern repeating or increasing?

**ANSWER** \_\_\_\_\_

- 4** Jay builds towers with 3 blocks, 5 blocks, 7 blocks. The next tower has \_\_\_\_\_ blocks.

**ANSWER** \_\_\_\_\_

## APPLY IT Show your work

**1** At snack time, fruit cups go apple, orange, apple, orange, \_\_\_\_\_. What fruit cup is next?

WORK SPACE

ANSWER \_\_\_\_\_

**2** Nia feeds her toy dinosaur 2 leaves, then 4 leaves, then 6 leaves. How many leaves come next?

WORK SPACE

ANSWER \_\_\_\_\_

## CHALLENGE One step up

### CHALLENGE

A game display shows 2, 5, 8, 11. Write the next two numbers. Tell how the pattern grows.

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## PART 1 • PRACTICE

| # | PROBLEM                                                                               | ANSWER           |
|---|---------------------------------------------------------------------------------------|------------------|
| 1 | Mia lines up crayons: red, yellow, red, yellow, _____. What color comes next?         | <b>red</b>       |
| 2 | A puppy gets 1 treat, then 2, then 3. Next time it gets _____ treats.                 | <b>4</b>         |
| 3 | A bracelet has star, heart, star, heart. Is the pattern repeating or increasing?      | <b>repeating</b> |
| 4 | Jay builds towers with 3 blocks, 5 blocks, 7 blocks. The next tower has _____ blocks. | <b>9</b>         |

## PART 2 • APPLY IT

1. **apple** The apple, orange group repeats, so apple is next.
2. **8 leaves** The number of leaves goes up by 2 each time, so 6 plus 2 is 8.

## CHALLENGE

**14, 17. It adds 3 each time.**

Accept color or shape words in place of pictures. For the challenge, accept any clear statement that the pattern adds 3 each time.