

Pattern Switch Lab

Show the same pattern in a new way.

GRADE 2 • 2.PFA.1.d

2.PFA.1.d "Transfer a given repeating or increasing pattern from one form to another (e.g., objects, pictures, numbers) and explain the connection between the two patterns."

NAME _____

DATE _____

MOVE A PATTERN

A pattern can repeat in the same order or increase by the same amount. To transfer a pattern, look at each part in order and show the same parts in a new form. Check that no part is skipped or changed.

WORKED EXAMPLE

A snail trail has groups of dots:
•, •••, •••••. Write the
matching number pattern.

1. The first group has 1 dot.
2. Each new group has 2 more dots.
3. Write the numbers in order: 1, 3, 5.

Answer: 1, 3, 5

PRACTICE 5 problems

- 1** A toy store packs button bags. The bags show: ••, ••••, ••••••. Write the matching number pattern.

ANSWER _____

- 2** A baker makes cookie trays with 2, 4, 6, 8 cookies. Write the matching dot groups.

ANSWER _____

- 3** A robot's lights flash red, blue, red, blue, red, blue. Use R for red and B for blue. Write the letter pattern.

ANSWER _____

- 4** A puppy's treat chart shows: ••••, ••••••, ••••••••. Write the number pattern.

ANSWER _____

- 5** A toy shelf holds 2, 4, 6 cars. Write the next two amounts with number words. Tell how the pattern grows.

ANSWER _____

APPLY IT Show your work

- 1** At Sam's sticker booth, the pattern is heart, star, heart, star, heart, star. Heart stickers go in bin 2. Star stickers go in bin 4. Write the bin number pattern.

WORK SPACE

ANSWER _____

- 2** At an arcade prize station, robot cards show 2, 4, 6, 8 tokens. Write matching dot groups. Then tell how the dot groups connect to the numbers.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A rocket game has score cards that show 4, 8, 12. Write the scores with number words. Then write the next two score cards and explain how the pattern grows.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A toy store packs button bags. The bags show: ••, ••••, ••••••. Write the matching number pattern.	2, 4, 6
2	A baker makes cookie trays with 2, 4, 6, 8 cookies. Write the matching dot groups.	••, ••••, ••••••, ••••••••
3	A robot's lights flash red, blue, red, blue, red, blue. Use R for red and B for blue. Write the letter pattern.	R, B, R, B, R, B
4	A puppy's treat chart shows: ••••, ••••••, ••••••••. Write the number pattern.	4, 6, 8
5	A toy shelf holds 2, 4, 6 cars. Write the next two amounts with number words. Tell how the pattern grows.	eight, ten. It grows by 2 cars each time.

PART 2 • APPLY IT

- 2, 4, 2, 4, 2, 4** Change each heart to 2 and each star to 4. Keep the stickers in the same order.
- , ••••, ••••••, ••••••••. The dot groups match 2, 4, 6, 8 and grow by 2 dots each time.** Make a dot group for each number on the cards. Each group has 2 more dots than the group before it.

CHALLENGE

four, eight, twelve; 16, 20. The pattern grows by 4 each time.

Accept commas or spaces between pattern parts. For dot-group answers, accept any clear set of marks with the correct number in each group.