LESSON MAKER PRO

Spot the Change

Find data patterns and decide where they fit.

GRADE 3 · 3.DS.A.1.c

3.DS.A.1.c "Identify patterns in the data and evaluate whether these patterns might apply to different contexts or situations."

NAME _____ DATE _____

LOOK, THEN THINK

Find how the number changes each time. Use that change to predict what comes next, then decide if the pattern makes sense in a new situation.

WORKED EXAMPLE

A class adds the same number of links to a paper chain each day. How many links will it have on Thursday? Would a plant be sure to grow by that same amount each day?

PAPER CHAIN

Day	Total links
Monday	8
Tuesday	16
Wednesday	24

1. From 8 to 16 is 8 more.
2. From 16 to 24 is 8 more.
3. Add 8 to 24 to get 32.
4. A plant may not grow the same amount each day.

Answer: 32 links. No, a plant is not sure to grow by the same amount each day.

PRACTICE 4 problems

1 Tickets sold on three days: 11, 13, 15. If the pattern continues, how many are sold on the next day?

ANSWER _____

2 Game scores after three rounds: 4, 9, 14. Predict the next score. Could this fit a game that gives 5 points each round?

ANSWER _____

3 Cups sold on three days: 18, 16, 14. Predict the next number. Could this pattern fit a growing card collection?

ANSWER _____

4 Riders on a bus after three stops: 30, 25, 20. Predict the next number. Must the pattern continue at every stop?

ANSWER _____

APPLY IT Show your work

1 This graph shows Maya's total arcade tickets. If the pattern continues, how many will she have on Thursday? Would a different game be sure to follow the same pattern? Explain.

MAYA'S ARCADE TICKETS



ANSWER _____

2 The table shows stickers left in a pack. If the pattern continues, how many are left on Friday? Could puzzle pieces left follow the same change if you place 4 pieces each day?

STICKERS LEFT

Day	Stickers
Tuesday	27
Wednesday	23
Thursday	19

ANSWER _____

CHALLENGE One step up

Find Thursday's amount in each column. Could both patterns continue forever? Explain.

AMOUNTS LEFT

Day	Beads left	Pages left
Monday	39	31
Tuesday	33	25
Wednesday	27	19

WORK SPACE AND ANSWER

ANSWER KEY

Spot the Change

GRADE 3 · 3.DS.A.1.c

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Tickets sold on three days: 11, 13, 15. If the pattern continues, how many are sold on the next day?	**17 tickets**
2	Game scores after three rounds: 4, 9, 14. Predict the next score. Could this fit a game that gives 5 points each round?	**19 points. Yes, the score goes up by 5 each round.**
3	Cups sold on three days: 18, 16, 14. Predict the next number. Could this pattern fit a growing card collection?	**12 cups. No, this pattern goes down, but a growing collection goes up.**
4	Riders on a bus after three stops: 30, 25, 20. Predict the next number. Must the pattern continue at every stop?	**15 riders. No, riders might get on at another stop.**

PART 2 · APPLY IT

1. **22 tickets. No, a different game might give a different number of tickets.** The total rises by 5 each day, so 17 + 5 = 22. A different game's rules might give a different number of tickets.
2. **15 stickers. Yes, both amounts can go down by 4 each day.** The number of stickers drops by 4 each day, so 19 - 4 = 15. Placing 4 puzzle pieces each day would leave 4 fewer each day.

CHALLENGE

Thursday: 21 beads and 13 pages. No, both amounts drop by 6 each day, and neither can go below zero.

Accept clear explanations that use the change in the data. For the challenge, accept any explanation that the amounts will eventually run out.