LESSON MAKER PRO

Outcome Match-Up

Pair every choice to find every possible outcome.

GRADE 4 · 4.PS.2.b

4.PS.2.b "Model and determine all possible outcomes of a given simple event where there are no more than 24 possible outcomes, using a variety of manipulatives (e.g., coins, two-sided counters, number cubes, spinners)."

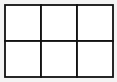
NAME _____ DATE _____

PAIR EVERY CHOICE

For two actions, pair each result from the first action with each result from the second action. An organized list or array helps you check that no pair is missing or repeated.

WORKED EXAMPLE

A two-sided counter shows red or yellow. Spin a spinner with blue, green, or purple sections. What outcomes are possible?



1. Write red and yellow.
2. Pair each color with blue, green, and purple.
3. List: red-blue, red-green, red-purple, yellow-blue, yellow-green, yellow-purple.

Answer: 6 outcomes

PRACTICE 4 problems

1 A spinner has red, blue, green, and yellow sections. Choose one card: A, B, C, or D. List all possible spinner-card outcomes.

ANSWER _____

2 A game lets you choose 1 of 5 robot bodies and 1 of 4 paint colors. How many robot designs are possible?

ANSWER _____

3 A lunch menu has 4 sandwich choices and 5 fruit choices. How many different lunches are possible?

ANSWER _____

4 A pet game has 5 pets and 4 hats. How many pet-hat outcomes are possible?

ANSWER _____

APPLY IT Show your work

1 At an esports club, Jay chooses 1 of 4 avatars and 1 of 5 badges. How many avatar-badge outcomes can Jay make?

WORK SPACE

ANSWER _____

2 Mina is making a trading card. She chooses 1 of 5 creature pictures and 1 of 4 border styles. How many different cards can she make?

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game has 4 character choices and 5 vehicle choices. Sam says there are 9 character-vehicle outcomes. Is Sam correct? Explain how to find all outcomes.

WORK SPACE AND ANSWER

ANSWER KEY

Outcome Match-Up

GRADE 4 · 4.PS.2.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A spinner has red, blue, green, and yellow sections. Choose one card: A, B, C, or D. List all possible spinner-card outcomes.	**red-A, red-B, red-C, red-D, blue-A, blue-B, blue-C, blue-D, green-A, green-B, green-C, green-D, yellow-A, yellow-B, yellow-C, yellow-D**
2	A game lets you choose 1 of 5 robot bodies and 1 of 4 paint colors. How many robot designs are possible?	**20**
3	A lunch menu has 4 sandwich choices and 5 fruit choices. How many different lunches are possible?	**20**
4	A pet game has 5 pets and 4 hats. How many pet-hat outcomes are possible?	**20**

PART 2 · APPLY IT

1. **20 outcomes** Each avatar can pair with all 5 badges. Multiply 4 by 5.
2. **20 different cards** Each creature picture can pair with all 4 border styles. Multiply 5 by 4.

CHALLENGE

No. Each of the 4 characters can pair with all 5 vehicles, so 4 groups of 5 make 20 outcomes.

Accept outcomes written in either order, such as A-red or red-A. Accept an organized list, array, or multiplication expression that shows all pairings.