Pair Them Up

Use pairs to sort groups of tiles.

2.N.1.5 "Use objects to determine whether a number is even or odd."

NAME _____ DATE _____

EVEN

Make pairs of two objects. A number is even when every object has a partner.

8 buttons make 4 pairs with none left over.

ODD

Make pairs of two objects. A number is odd when one object is left without a partner.

11 shells make 5 pairs with 1 left over.

1 SORT

8 items

In Part 1, pair shaded squares in the top and bottom rows and circle EVEN or ODD for each group; in Part 2, choose one item from each category and explain how pairs helped you decide.

1. 

4 tiles

EVEN ODD

2. 

10 tiles

EVEN ODD

3. 

7 tiles

EVEN ODD

4. 

14 tiles

EVEN ODD

5. 

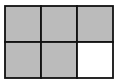
6 tiles

EVEN ODD

6. 

9 tiles

EVEN ODD

7. 

5 tiles

EVEN ODD

8. 

12 tiles

EVEN ODD

2 PROVE IT

Explain your thinking

Choose one item from each category and explain how pairs helped you decide.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Write a new number of tiles for EVEN and a new number of tiles for ODD, and tell how many pairs each group makes.

EVEN _____

ODD _____

CHALLENGE

You have 13 tiles. Add 1 tile. Is the new group even or odd? Explain with pairs.

ANSWER KEY

Pair Them Up

GRADE 2 · 2.N.1.5

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	4 tiles (array)	**EVEN**	The 4 tiles make 2 pairs with none left over.
2	10 tiles (array)	**EVEN**	The 10 tiles make 5 pairs with none left over.
3	7 tiles (array)	**ODD**	The 7 tiles make 3 pairs with 1 left over.
4	14 tiles (array)	**EVEN**	The 14 tiles make 7 pairs with none left over.
5	6 tiles (array)	**EVEN**	The 6 tiles make 3 pairs with none left over.
6	9 tiles (array)	**ODD**	The 9 tiles make 4 pairs with 1 left over.
7	5 tiles (array)	**ODD**	The 5 tiles make 2 pairs with 1 left over.
8	12 tiles (array)	**EVEN**	The 12 tiles make 6 pairs with none left over.

PART 2 · PROVE IT

Task: Choose one item from each category and explain how pairs helped you decide.
Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **EVEN**: 2 tiles are EVEN: 1 pair with none left over.
- **ODD**: 3 tiles are ODD: 1 pair with 1 left over.

Challenge: 14 tiles are even because they make 7 pairs with none left over.

For Part 2, students may choose any one even item and one odd item. For example, item 1 makes 2 pairs with none left over, while item 3 makes 3 pairs with 1 left over.