Pair It Up

Sort numbers by making equal pairs.

2.NS.1 "The student will utilize flexible counting strategies to determine and describe quantities up to 200. Represent forward counting patterns when counting by groups of 2 up to at least 50..."

NAME _____ DATE _____

EVEN NUMBERS

An even number can be split into two equal groups. Nothing is left over.

14 shells can make 2 equal groups of 7 shells.

ODD NUMBERS

An odd number makes two equal groups with 1 left over.

17 shells can make 2 groups of 8 shells, with 1 shell left over.

1 SORT

8 items

Circle EVEN or ODD for each number, then in Part 2 choose two items and tell how you knew.

1. 22 counters — EVEN ODD
2. 19 blocks — EVEN ODD
3. 45 stickers — EVEN ODD
4. 36 crayons — EVEN ODD
5. 8 buttons — EVEN ODD
6. 27 pencils — EVEN ODD
7. 50 beads — EVEN ODD
8. 13 coins — EVEN ODD

2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

ITEM # _____ **HOW I KNEW** _____

ITEM # _____ **HOW I KNEW** _____

3 MAKE YOUR OWN

One of each

Your teacher gives you 50 counters and two mats. Choose a NEW even number and a NEW odd number, each at most 50. For each, count out that many counters and actually share them into equal groups on the mats. Show no leftover for EVEN and exactly 1 for ODD. Show your teacher, then draw or write your two groups and explain the leftover.

EVEN _____

ODD _____

CHALLENGE

You have 41 beads. Is 41 EVEN or ODD? Write it as two equal addends plus a leftover, if needed.

ANSWER KEY # Pair It Up

GRADE 2 · 2.NS.1

PART 1 · SORT

#	ITEM	CATEGORY	WHY
1	22 counters	**EVEN**	22 can be split into two equal groups of 11.
2	19 blocks	**ODD**	19 can be split into two groups of 9 with 1 left over.
3	45 stickers	**ODD**	45 can be split into two groups of 22 with 1 left over.
4	36 crayons	**EVEN**	36 can be split into two equal groups of 18.
5	8 buttons	**EVEN**	8 can be split into two equal groups of 4.
6	27 pencils	**ODD**	27 can be split into two groups of 13 with 1 left over.
7	50 beads	**EVEN**	50 can be split into two equal groups of 25.
8	13 coins	**ODD**	13 can be split into two groups of 6 with 1 left over.

PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **EVEN**: 24 counters can make 2 equal groups of 12.
- **ODD**: 29 counters can make 2 groups of 14, with 1 counter left over.

Challenge: 41 is ODD. 20 + 20 + 1 = 41.

For Part 2, accept explanations that use equal groups, pairs, or equal addends. An odd-number explanation must include one leftover. Before Part 3, supply 50 same-size counters and two group mats to each child or pair. Observe each child count out and move the chosen sets, one counter to each mat in turn, then count both groups and the leftover. New examples must be within 1–50; accept any accurate even/odd quantities, including drawings or adult recording. Sample 24 has 12 on each mat, none left; 29 has 14 on each mat and 1 left. Written decompositions alone do not complete the concrete task.