

Objective

Use number patterns to skip-count by 5s on a hundred chart.

Common Core State Standards

 2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.

Number and Operations in Base Ten

Skip-Counting by 5s

It is important for teachers to offer children opportunities to make generalizations about observations they make while exploring mathematical situations. Using a hundred chart allows children to organize information in an easy-to-follow visual model. As children explore skip-counting, they begin to see a relationship between number patterns and operations. As they begin connecting the two, they form the basis of algebraic thinking.

Try It! Perform the Try It! activity on the next page.

Talk About It

Discuss the Try It! activity.

- Ask: What do you notice about the numbers in each column you marked with a 2-cm Color Cube? Guide children to conclude that they all end in 0 or 5.
- Ask: When might we use skip-counting by 5s?
- Ask: How is skip-counting by 5s the same as skip-counting by 2s? How is it different? How is skip-counting by 10 different from skip-counting by 5? How is it the same? Can you rewrite the problem so that it uses skip-counting by 10? by 2?

Solve It

With children, reread the problem. Have them explain in writing how Terra can use skip-counting by 5s on a Hundred Chart to find the total number of chairs.

More Ideas

For other ways to teach about skip-counting by 5s-

- Have children use Snap Cubes[®] to make 10 trains of 5 cubes each. Have them touch each train as they skip-count by 5s and say the numbers aloud.
- Have children use 2-cm Color Cubes and a Hundred Chart (BLM 2) to skip-count by 10s and mark those with a green cube. Then skip-count by 5s and mark those with a yellow cube. Have children put a yellow cube on top of a green cube where both numbers occur together. Have children compare the two patterns.
- Have children use Two-Color Counters and a Hundred Chart to count by 5s, but start on 12. Ask: What happened to the number pattern we saw when we started at 1?

Formative Assessment

Have children try the following problem.

Complete the pattern.

0, 5, 10, 15, _____, ____, _____,

Try It! 20 minutes | Groups of 3

Here is a problem about skip-counting by 5s.

In Terra's classroom, there are 4 tables. Each table has 5 chairs. How could Terra find the total number of chairs without counting each chair one by one?

Introduce the problem. Then have the children do the activity to solve the problem.

Give 2-cm Color Cubes, a Hundred Chart (BLM 2), and a crayon to each group.



1. Have children count by 1s to 5, then place a color cube on the number 5 on the Hundred Chart. **Ask:** *If we count 5 more, what number would we land on?* Children should count 5 more on the Hundred Chart and then place a cube on the 10. Have children continue to count 5 more and place a cube on every fifth number until they reach 20.



3. Ask children to describe the pattern they see in the numbers. Have children work in groups to place the rest of the cubes on the chart, completing the number pattern to skip-count by 5s to 100. Then have two groups race. One group counts to 20 by 1s, and the other group counts by 5s. **Ask:** Which group reached 20 first?

Materials

- 2-cm Color Cubes (20 per group)
- Hundred Chart (BLM 2; 1 per group)
- crayons (1 per group)



2. Have one group member recount by touching the marked numbers and saying just the fifth numbers aloud. Have another group member remove the cubes one at a time and use the crayon to circle those numbers on the Hundred Chart.

🛦 Look Out!

For children who need more help understanding skip-counting, draw a number line with 20 numbers. Circle the 5s and mark Xs through the other numbers. Explain that when you skip-count, you "skip" over certain numbers.

Answer Key

Use 2-cm Color Cubes and a Hundred Chart. Make the chart shown. Write the numbers of

the skip-counting.

I

(Check students' work.)

| 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | |
|----|----|----|----|----|----|----|----|--|
| 11 | 12 | 13 | 14 | 16 | 17 | 18 | 19 | |
| 21 | 22 | 23 | 24 | 26 | 27 | 28 | 29 | |
| 31 | 32 | 33 | 34 | 36 | 37 | 38 | 39 | |

Model skip-counting by 5. The starting number is given. Write numbers in the blanks.



Answer Key

Challenge! When you skip-count by 5, what digits are in the ones place of the numbers you say? Draw a picture to help.

Challenge: (Sample) 0 and 5



2 Number and Operations in Base Ten

Name _

Use 2-cm Color Cubes and a Hundred Chart. Make the chart shown. Write the numbers of the skip-counting.

| • | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | |
|---|----|----|----|----|----|----|----|----|--|
| | 11 | 12 | 13 | 14 | 16 | 17 | 18 | 19 | |
| | 21 | 22 | 23 | 24 | 26 | 27 | 28 | 29 | |
| | 31 | 32 | 33 | 34 | 36 | 37 | 38 | 39 | |

Model skip-counting by 5. The starting number is given. Write numbers in the blanks.



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_/ ____/ ____

Challenge! When you skip-count by 5, what digits are in the ones place of the numbers you say? Draw a picture to help.

Name

| I | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|-----|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |