Skip Counting to 100 by Twos, Fives, and Tens

Math Background
Once children can count forward and backward by ones, it is important that they begin to develop an understanding of skip counting to make counting greater quantities more efficient. First, they count forward using skip counting, and then they count backward using skip counting. Children develop skills in counting on and counting back from different starting points. Skip counting helps children recognize number patterns and supports them when they begin to work with money. Children benefit from using tools and strategies such as concrete materials, 100-charts, coins, and number lines when counting.

Activity: Skip Counting to 100 by Twos

Materials
- Number cards from 1 to 100 with one number on each card. (You may wish to have your child help you make the cards to practise writing numbers.)
- Small objects to use as counters, such as buttons, beads, Lego® blocks, paper clips, stickers, or homemade counters made by cutting out small squares or circles of paper
- A 100-chart (A 100-chart is provided or you can make your own.)

What to Do

Practise Counting Forward and Backward by Ones
1. Use the 100-chart and have children count forward by ones. Have them point to each number as they say it. Children may have difficulty when they transition from one decade to the next, for example from 29 to 30. You may wish to have them place a counter on each number as they say it.
2. Then have children count backward by ones using the 100-chart.

Count Forward and Backward by Ones From Any Number
3. Mix up the number cards. Have children select a card and count forward from that number by ones. They may use the 100-chart to help them.
4. Then have children choose a card and count backward from that number. Counting backward is more difficult for children than counting forward, so they may wish to use smaller numbers to begin (20 and then 50).
Skip Count Forward by Twos to 20
5. Make a number path on the floor using painters’ tape. Mark off the numbers from 1 to 20 at even intervals. The intervals should be short enough that children can jump safely two numbers at a time. Children jump on every second number and say the number (2, 4, 6, 8, 10, 12, 14, 16, 18, 20).
6. Make a number path on a piece of paper, as shown. Write the numbers 1 to 20 at equal intervals. Children use small building blocks or other small items. Have them place a pair of items above the number path, for example, two Lego® blocks stuck together over the number 2, then two more blocks over the number 4, and so one, until they reach the number 20. Children then practise counting the sets of blocks and pointing to the sets as they count them.

Skip Count Forward by Twos to 100
7. Have children count by twos using the 100-chart. They can place a small object on each number or circle each number as they skip count by twos. Ask children, What pattern do you notice when we skip count by twos? (It goes 2, 4, 6, 8, 10 and then I switch to the next group of 10—22, 24, 26, 28. I notice that the ones digits—2, 4, 6, 8, and 0—are always in the same order.)
8. Provide children with 100 small objects such as paper clips, Lego® blocks, crayons, and so on. Have them arrange the objects in pairs and count them. They can use the 100-chart to help them.

Count Forward and Backward by Twos From Any Even Number
9. Select all the even numbered number cards (2, 4, 6, 8, …).
10. Have children choose a number and start skip counting forward from that number. They can use the 100-chart to help them count.
11. Select the even numbered number cards from 2 to 50. Have children select a card and count backward by twos. Use the 100-chart to support their counting.

Questions to Check for Understanding
1. Why do you think people sometimes count by twos? (Counting by twos is faster than counting by ones. It is easier to count things that come in pairs, like mittens or shoes.)
2. How is skip counting by twos the same as counting by ones? (We still get the same number of objects. We say some of the same numbers.)
3. How is skip counting by twos different from counting by ones? (I don’t say every number. The numbers follow the pattern 2, 4, 6, 8, 0. I am counting groups.)
4. Do you get the same number of objects if you count by twos as when you count by ones? (Yes, because I am just using different ways to count the same objects.)
Activity: Skip Count Forward to 100 by Fives and by Tens

Materials

- 100 small items to count, for example, Lego® blocks, small paper clips, nuts, washers, beads, counters, Cheerios® (or you can make 100 small circles cut from paper)
- Twenty 5-frames and ten 10-frames (A 5-frame and a 10-frame are included here, but you may wish to make your own.)
- Two 100-charts (A 100-chart is included here, but you may wish to make your own.

What to Do

Skip Count to 100 by Fives

1. Display 100 small items clustered together as shown in the photograph of the toy seals. Ask children, How many [seals] are there? How did you find out? (I counted them by ones. I put them in pairs and counted them by twos.) Would you get a different number if you counted them by ones or by twos? (No, there are the same number of objects, so it doesn't matter if I counted by ones or by twos.)

2. Provide children with twenty 5-frames. Ask, How could you use 5-frames to count the objects? Have children fill the 5-frames by placing one object in each square of the frame until they have counted all the objects.

3. Use the 100-chart and have children circle the number of objects from the first 5-frame. (They circle 5.) Then have them circle the number that shows how many objects are in the first and second 5-frames (They circle 10.) Then circle the number of objects from the first, second, and third 5-frames (15), and then the fourth 5-frame (20). Continue to circle the numbers in this way up to 100.

4. Have children examine their 100-chart and ask, What pattern do you notice? (The ones digit is always 5 or 0.) How can this pattern help you count by fives? (I just change the tens numbers 5, 10, 15, 20, 25, but the ones numbers are always 5 and then 0.)

5. Ask children, When you count by fives, how many objects are in each group? (5)

6. Have children use the 100-chart to count by fives.
Skip Count to 100 by Tens

7. Provide 10-frames to children. Ask, **How can you use the 10-frames to help you count the objects?** *(I can fill the 10-frames until I have no objects left.)*

8. Ask, **What do you think we are counting by when we are using the 10-frame?** *(We are counting by tens.)*

9. Have children show counting by tens by circling the numbers on the 100-chart (as they did when they were counting by fives).

10. Have children look at the numbers circled on the 100-chart and ask, **What pattern do you notice?** *(The end digit is always zero. The numbers are all in the last column of the 100-chart.)*

11. Have children practise counting by tens to 100.

12. Ask children, **When you count by tens, how many objects are in each group?**

13. When children have demonstrated proficiency in counting forward by tens, have them count backward by tens.

**Questions to Check for Understanding**

1. **How is counting by fives and tens the same as counting by ones?** *(The numbers get bigger as you count. The numbers follow a pattern. You get the same number at the end when you are done counting.)*

2. **How is counting by fives and tens different from counting by ones?** *(It takes longer to count by ones. When I count by ones, I say all the numbers, but when I count by fives and tens, I don’t say all the numbers.)*

3. **How is counting by fives the same as counting by tens?** *(They are both counting in groups. They both have numbers that end in 0.)*

4. **How is counting by fives different from counting by tens?** *(When I count by fives, the end numbers change from 5 to 0 and then repeat, but when I count by tens, the end number is always 0. When I count by tens, the groups have more objects in them.)*

5. **When might you count by fives or tens?** *(When I count nickels and dimes.)*
My name is ____________________________.
My name is ______________________________.