

Linear Counting  
Teen Boards - Quantity

→ Tray

An open box containing 1 bead bar for each of the colors below:

- (1) red
- (2) green
- (3) pink
- (4) yellow
- (5) light blue
- (6) lavender
- (7) white
- (8) brown
- (9) dark blue

An open box containing 9 Golden Bead Ten Bars

An open box containing 1 set of Colored Bead Bars

→ Floor rug

General Presentation:

1. Invite a child or group of children.
2. Go over to where the floor rugs are kept.
3. Choose a rug and take it over to the floor and unroll it as you have been shown before.
4. Take a tray and go over to where the math materials are kept.
5. Pick-up the open box containing the ten bars and put them on the tray.
6. Pick-up the open box containing the Colored Bead Bars and put them on the tray.
7. Take the tray over to the rug and put it at the far top left-hand corner.
8. Take the boxes off the tray and place them below the tray. (The ten-bar box on the left and the colored bead bars on the right)
9. Take the colored bead bars and put them in order forming a pyramid right below the two boxes.
10. Pick-up one ten bar and put it on the rug vertically.
11. Pick-up the one-unit colored bead and place it to the right and at the top of the ten-bar. Point and say to the child, "ten and one more are eleven".
12. Repeat for introducing twelve in the same way.

13. Give a 3-Period Lesson with the quantity of eleven and twelve.
14. When the child retains the third step in the 3-Period Lesson, take the ten-bar away and ask the child to make eleven and then twelve using the colored bead bars.
15. Continue Steps 11-15 until all the teens up and including 19 have been retained.

Points of Interest:

1. Counting each bead bar
2. Many different combinations to make ten

Control of Error:

1. The child doesn't have the colored bead bars in order

Aims:

To learn the quantity of teens and their sequence, etc.

Age:

4 and up

Language:

Names of the teen numerals, etc.

## Linear Counting Teen Boards - Symbols

### Materials:

A rectangle box with lid containing:

- (2) wooden boards with five wooden strips each going across the board horizontally with the numeral ten printed/in each slot
- (1) set of Numeral Cards - one through nine (these cards fit the slots in the wooden boards)
  
- Floor rug

### General Presentation:

1. Invite a child or group of children.
2. Go over to where the floor rugs are kept.
3. Choose a rug and take it over to the floor and unroll it as you have been shown before.
4. Go over to where the Teen Boards are kept.
5. The teacher should name the material for the child, "Teen Boards".
6. The teacher should demonstrate how to carry the box with two hands (thumbs on the top of the unopened lid and fingers underneath the box).
7. Invite a child to carry the box over to the rug.
8. Place the box on the rug in the upper left-hand corner.
9. Remove the lid and place it to the right of the box.
10. Remove each of the boards and place them vertically one on top of the other on the center of the rug.
11. Remove the Numeral Cards and put them in order with the one on the top of the stack.
12. Place the Numeral Card stack, number side-up, to the right side of the first Teen Board.
13. The teacher should point to the first numeral ten at the top of the boards and say, "ten".
14. Take the numeral one from the top of the stack of Numeral Cards and slide it from the right side into the slot and cover the zero and say, "and one are eleven".
15. Point to the second numeral ten (right underneath the first one) and say "ten".
16. Take the numeral two from the top of the stack of Numeral Cards and slide it from the right side into the slot and cover the zero and say, "and two are twelve".
17. Give a 3-Period Lesson with the quantity of eleven and twelve.
18. When the child retains the third step in the 3-Period Lesson

take the numeral one and two away and ask the child to make eleven and then to make twelve.

19. Continue, as the child is able, until all the teens up and including 19 have been retained.
20. Replace the Numeral Cards into the box.
21. Replace each board in the box and put the lid on top.
22. Return the Teen Boards back to the shelf where they belong.
23. Roll your rug as you have been shown and return it to its place.

Presentation 2 - Mixed-Order:

Repeat General Presentation, but put the Numeral Cards in mixed-order in a stack.

Points of Interest:

1. Counting each teen numeral

Control of Error:

1. The child doesn't have all of the Numeral Cards

Aims:

To learn teen symbols and their sequence, etc.

Age:

4 and up

Language:

Names of the teen numerals, etc.

Linear Counting  
Teen Boards – Quantity and Symbols

Materials:

A rectangle box with lid containing:

- (2) wooden boards with five wooden strips each going across the board horizontally with the numeral ten printed/in each slot
- (1) set of Numeral Cards - one through nine (these cards fit the slots in the wooden boards)

An open box containing 1 bead bar for each of the colors below:

- (1) red
- (2) green
- (3) pink
- (4) yellow
- (5) light blue
- (6) lavender
- (7) white
- (8) brown
- (9) dark blue

An open box containing 9 Golden Bead Ten Bars

- Floor rug

General Presentation:

1. Invite a child or group of children.
2. Go over to where the floor rugs are kept.
3. Choose a rug and take it over to the floor and unroll it as you have been shown before.
4. Go over to where the Teen Boards are kept.
5. Invite a child to carry the box over to the rug as they have been shown before.
6. Place the box on the rug in the upper left-hand corner.
7. Remove the lid and place it to the right of the box.
8. Remove each of the boards and place them vertically one on top of the other on the center of the rug.
9. Take the ten bars and put them at the upper left of the rug under the Teen Board box.
10. Take the colored bead bars and put them in order forming a pyramid and place them to the right of the ten bars.
11. Remove the Numeral Cards and put them in order with the

- one on the top of the stack.
12. Place the Numeral Card stack, number side-up, to the right side of the first Teen Board.
  13. Pick-up a golden bead ten bar and put it to the left side of the top ten symbol on the top board. Say to the child, “ten”.
  14. Pick-up the one bead from the colored bead bars and put it to the right of the golden bead ten bar. Say to the child, “and one are eleven”.
  15. Using your index finger, point to the symbol ten that is next to the quantity of eleven and say, “ten”.
  16. Take the numeral one from the top of the stack of Numeral Cards and slide it from the right side into the slot and cover the zero and say, “and one are eleven”.
  17. Continue until all the teens up and including 19 have had the child make the quantity and then the symbol.
  18. Pick-up with the second lesson in a 3-Period Lesson by asking the child to point to the different quantities and symbols.
  19. Continue, as the child is able, until all the teens up and including 19 have been retained.
  20. Replace the Colored Bead Bars back into the box and return them to the shelf where they belong.
  21. Replace the Numeral Cards into the box.
  22. Replace each board in the box and put the lid on top.
  23. Return the Teen Boards back to the shelf where they belong.
  24. Roll your rug as you have been shown and return it to its place.

#### Presentation 2 - Mixed-Order:

Repeat General Presentation, but put the Numeral Cards in mixed-order in a stack.

#### Presentation 3 - Random Numeral, Go Fetch Quantity:

The teacher should pick a Numeral Card and put it in the first slot of the board and ask the child to make the quantity.

#### Presentation 4- Random Quantity, Go Fetch Numeral:

The teacher should place a quantity of beads to the left side of the first slot of the board and ask the child to fetch the numeral.

#### Presentation 4- Making Numeral and Quantity Pictures:

The teacher makes picture cards of the teen quantities. The teacher gives the child a picture of the quantity and the child makes the quantity and fetches the appropriate numeral.

Points of Interest:

1. Counting each teen numeral and finding the teen symbol

Control of Error:

1. The child was introduced to this activity too quickly by teacher.

Aims:

To have the child associate the teen quantities with the teen numerals.

Age:

4 and up

Language:

Names of the teen numerals, etc.