Counting Junior/Senior Infants and First/Second class

Taken from Ready Set Go Maths (E. Pitt) and Elementary and Middle School Mathematics Teaching Developmentally (Sixth Edition) by John A. Van de Walle

The ability to recite number words in order is a prerequisite to developing an ability to counting a wide range of objects. Children’s ability to recite numbers in order is usually more developed than their ability to count objects. However pupils who find Maths difficult often don’t have a full grasp of number sequences and can gain in confidence in this area if the teacher provides daily 10 minute Oral choral work.

These sessions should have:
- A lively pace
- Enthusiastic participation
- Two or three different short focussed activities (variety will maintain interest)
- Physical activity
- Choral response
- Individual response

The pupils should develop the ability to:
- Count forwards
- Count backwards
- Count forwards/backwards from different starting points.

Some suggested activities:
- **Counting stick**
- **Rhythm counting** - use actions such as: clapping, slapping, tapping. Pupils chant number words in time with the rhythm
- **Counting apple** (pendulum) Pupils chant numbers in time to a swinging apple (weight attached to a long string). This can also be used for counting quantities/sets of objects
- **Live number line**: Pupils are given large cards with each number and are asked to line up in order of the sequence. Teacher/pupil then ask other pupils to swap with those in the line emphasising language: before/after, more than /less than, between, first/second..., Largest/smallest etc
- **The Sound of a Number Game**: Teacher drops cubes into a tin. The children count silently in their head. Extension teacher takes out some cubes and adds in others after the children count.

- **Stand and Sit game**: Pupils stand and then sit while saying the number sequence required.

- **Clap and Snap game**: Count forwards clapping in time, then count backwards snapping fingers in time.

- **Stamp and tap**: Pupils find a space facing the board. Count forwards stamping feet in time. Stop at required number word and turn in opposite direction. Now count back tapping their shoulders in time. (Do this without pausing!)

- **Class number line** (Pegs on a line): Count forwards/backwards while looking at each number. T. points to a number and pupils say that number together. Say number before/after given number. Turn one number around, pupils tell (individually) hidden number and explain their thinking.

- **Show me**: Teacher shows flash cards with different numbers of objects. Pupils count silently and show corresponding number using Digit cards.

- **Move your marker**: Pupil have number line (1-5/1-10/100 square) and a counter/cube. T. gives instructions e.g. “Put your counter on the number that comes just before/after” or on any number greater than…/between etc.

- **Head and shoulders**: Tap head and shoulders in turn to a rhythm. Say number sequence while doing this. Then develop it asking pupils to only say the number on the head tap. Number on shoulder tap is said silently.

- **Pass the Teddy**: Pupils stand in a circle. As Teddy is passed around the ring pupils say the next number or can say “I am one I pass it to two” etc.

- **Count Around**: Pupils stand in a circle and count around, each child saying the next number in the sequence.. Start counting at one, pupil who says number 12 sits down. Keep going until only one child is standing. (could vary this use shorter/longer sequences, use different starting/finishing points, do it backwards)

- **Counting Choir**: Divide class into 3 groups. Teacher in role of conductor with baton. T begins to count and then points baton at one group to continue to count in unison. T then points to different group and continues.
• **Hand Game:** teacher picks a starting point say 12. If teacher raises her/his hand up it mean count one digit more, if the hand faces down it means one digit less. (An extension is to include hand faces to the right then it means 10 more, if the hand faces left it means 10 less)

• **100 Square jigsaw:** A 100 square cut up into segments. Teacher hands out the segments to the children. The children put the 100 square back together

• **Guess my number:** Show the children a section of a digit and get them to guess what the number is. Ask them to justify their answer

• **Find and Press:** Every child should have a calculator. Always begin by having the children press the clear key. Then you say a number, and the children press that number on the calculator. If you have an interactive whiteboard calculator, you can then show the children the correct key so that they can confirm their responses, or you can write the number on the board for children to check. Begin with single-digit numbers. Later, progress to two or three numbers called in succession. For example, call, ‘Three, seven, one.’ Children press the complete string of numbers as called.

• **Counting On with Counters:** Give each child a collection of 10/12 small counters that the children line up from left to right on their desks. Tell them to count four counters and push them under their left hands or place them in a cup. Then say, ‘Point to your hand. How many are there?’ (4). ‘So let’s count like this: f-o-u-r (pointing to their hand), five, six...’ Repeat with other numbers under the hand.

• **Make a Two-More-Than Set:** Provide students with about six dot cards. Their task is to construct a set of counters that is two more than the set shown on the card. Similarly, spread out 8-10 dot cards, and find another card for each that is two less than the card shown. (Omit the 1 and 2 cards for two less than, and so on.)

• **A Calculator Two-More-Two Less Than Machine:** Teach children how to make a two-more-than machine. Press 0 +2=. This makes the calculator a two-more-than machine. Now press any number e.g. 5. Children hold their finger over the = key and predict the number that is two more than 5. Then they press = to confirm. If they do not press any of the operation keys (+, -, x, ÷), the ‘machine’ will continue to perform in this way.