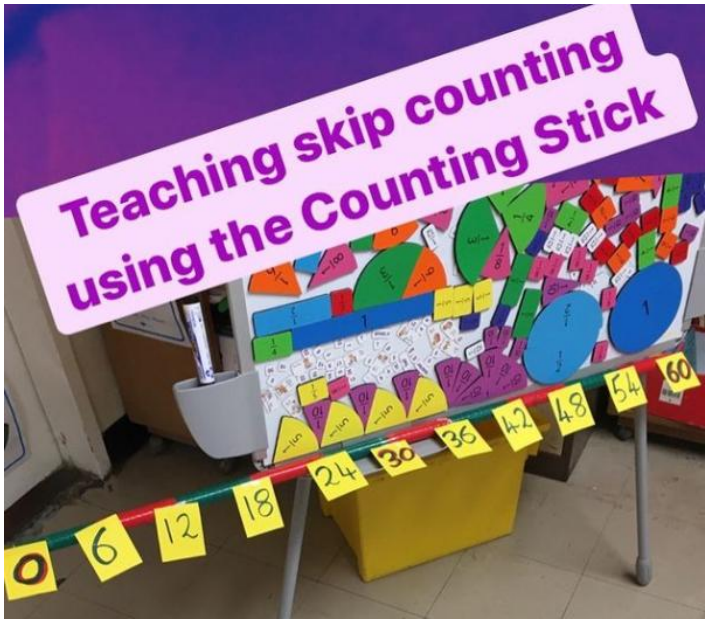
Counting Stick Activities: Junior classes-2nd class

A counting stick is a metre long stick that is divided into ten equal sections. It can be used as an invaluable tool for developing and mastering mental and oral maths in the classroom. This visual aid can be used with the whole class, with all age groups from junior to senior classes to teach basic to more complex operations.

Additional option: You can divide one side of the counting stick into 10 equal parts, and divide the other side divided into 12 equal parts with quarterly divisions also evident.

Sticks can be made easily using metre cut wood. You can use a broom handle or something similar like plastic piping. The lagging plumbers use for pipes also works well as you can pin numbers onto it easily. Segment the metre into ten equal parts using paint or coloured tape.

The teacher can use the counting stick for all kinds of oral counting activities. Hold the counting stick and always begin on the right hand of the stick so that this is the left from pupils point of views!



Counting Stick divided into 10 equal parts

Suggested activities for starting to use the counting stick:

- Varied increments: At the beginning, until pupils are more familiar with the counting stick, begin with zero. However, the start of the stick *can* represent any number you want to count from e.g. zero, 10, 50 etc.

→ The value of each step on the number stick can be one

- You can add pieces of Velcro at each divider in order to attach items/ numbers to the stick.

→ Name one end of the counting stick 0 and the other end 10. Start at zero and move along the counting stick one division at a time asking which number would go at each mark.

→ Count forwards and backwards

→ The teacher can point to random divisions of the counting stick for the pupils to name the missing number

→ The teacher can hold the counting stick in the centre at position 5 and ask pupils to count on or back from this number.

→ Name one end of the counting stick 0 and the other 20 and do activities as above but count in 2's.
→ Count in 3's, 4's 5's and 10's etc. also
→ Change the starting numbers, e.g. 6 and count on from 6 to 16, count backwards, point to random divisions and ask questions such as what number goes here etc. change the starting numbers regularly
→ On a zero to 10 stick, point to halfway between divisions ask what goes here. Count in halves from zero to ten.

More advanced counting activities

→ Count in patterns such as 3, 8, 13, 18, 23, 28... ask the children what they notice.

→ Start counting forwards and partway through. Stop and count back one division before counting forward.

→ Discuss statements such as… If this is 2 and we are counting in twos, what number is this, and this, and this… as you point to different parts of the counting stick.

…If this is 30 and we are counting in twos, what number is this, and this, and this etc.

→ *Skip counting with younger classes, vary the incrememements:* The increments could be in 5's, 10's etc

→ Skip counting with 2nd class: Do the above activity for *zero to 60, zero to 90 etc*. On a zero to 70 stick, estimate where 7, 14 will be.

→ *Count in 10's or 100's.* The stick could represent 0-100 (counting in 10's), 0-50 (counting in 5's), 0-20 (counting in 2's)

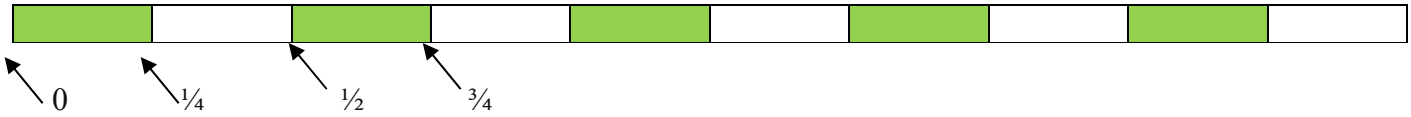
→ Practice *counting forwards,* and when confident *count backwards* with above activities

→ Use the stick as 0-20 and ask where 8, 14, 20 would be, Use the stick as 0-50 and ask where 25, 30, 45 would be.

- Discuss number sequences: Teacher points to the centre of the stick and ask questions such as: *if this is 40, what are the numbers either side of these numbers? What is the number at the beginning of the stick? What is the number at the end of the stick? What else could they be?* Provided they can justify their answers, children can specify any value for the numbers. Therefore with the number 40 in the middle, the numbers either side could be 39 and 41 etc.

- Fractions (2nd class)

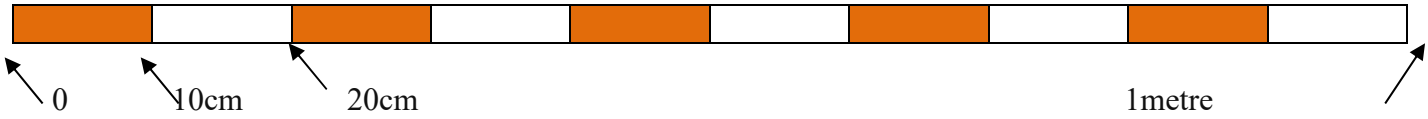
→ You can count in ½ 's, ¼ 's



- Money: The stick could represent 0-€1 and therefore count in ten cent. Find where 1c, 25c etc. would be…

- Length:

→ The stick can represent 0-one metre, count in 10cm. Estimate where different amounts such as 15cm, 55cm, and 65cm would be.



- Time: Set a start time at the beginning of the stick and specify the time interval of each block. If the beginning of the stick is 9 o'clock, where is 12 o' clock? Use digital time too. You could use a hula hoop as a circular version of the counting stick which can be really useful for mental work on the clock and revising months/ seasons etc.

- Practising addition facts: For example, if the teacher is teaching numbers that add up to ten, he could tell the pupils that one end of the stick is 0 and that the other end is 10. The teacher can then place a finger at different points on the stick and ask the pupils what number that represents. If the teacher places his finger at the end of the sixth section and pupils would say that this represents the number 6. Then pointing at the stick, the teacher can ask what number added to 6 makes 10. All the different combinations of numbers that make ten can be shown in this way. Likewise adapt this to bigger numbers (20 +80=100…)

Counting Stick divided into 12 equal parts

Time:

1. *Months of the year:* Begin at January and say the months through to December.
2. *Seasons:* Identify the seasons and what months in each season etc.
3. *Special times of the year:* Identify various times of the year, e.g. Children's birthdays etc
4. *12-hour clock :*
   a) Pupils can count from 1 o'clock to 12 o'clock, from midnight to midday, from midday to midday.
   b) Identify when school starts, lunchtime, home time, bedtime etc.
   c) Point to random divisions for pupils to identify the hours
   d) Point to halfway between the hours for pupils to identify half past each hour

Counting Stick divided into 4 equal parts

Quarters:

1. Name one end of the stick zero and the other end 1. Name the divisions of one half, one quarter, three quarters. Count from zero to 1.
2. Name the start of the counting stick zero and the other end 20. Pupils identify where half would be and what half of 20 is. Likewise, pupils identify ¼ and then ¾.
3. Carry out with other numbers such as 0-4, 0-8, 0-12, 0-16 etc.