

**School/ Name:** Newington Green Primary School, Rosa Treveni

**Heading: What is the 'five and a bit' structure? Teaching composition of number using fingers.**

**TfM Big Idea(s):**

**FLUENCY AND REPRESENTATIONS**

**Summary of initiative:**

- Y1 class autumn term finding it difficult to subitise – recognise numbers without counting, move between spoken numbers, numerals, number words, and to compare numbers.
- 'Grow it', 'show it', 'throw it' encourages children to move away from counting fingers one at a time.
- Fingers as a subitisable image for numbers, embodied in muscle memory (Gifford).
- Responding to '7' or 'seven' and later dice/ten frames with correct number of fingers.
- Five and a bit structure used to partition numbers 6-10 e.g. six is five and one more.
- Challenge some children able to link to money and unitising e.g. 8p is 5p and 3 pences
- Provided link to ten frame, a number that has special importance in our number system.
- Referred back to 'five and a bit' structure in Spring 1 to double and halve numbers 5-10 using partitioning rather than 'sharing'.

**Key learning and impact:**

- Part-whole awareness – confidence in describing parts and whole.
- Seeing numbers as combinations of other numbers (conceptual subitising) transfers to new learning e.g. 7 is made of 5 of 2, it's also made of 4 and 3.
- Ability to think about numbers as compositions of other numbers was described by Resnick (1983) as 'probably the major conceptual achievement of the early school years'.
- Familiarity with different images for numbers, emphasising number properties.
- Recognising greater than/less than using ten frame, using vocabulary.
- Partitioning as a helpful calculation strategy.
- 'Five and a bit' as foundation for teen numbers as 'ten and a bit'.

**Top tips for another school:**

- Don't assume that children can represent numbers on fingers without counting ones, they might need practice!
- Opportunities for conceptual subitising will set children up for later success in calculation

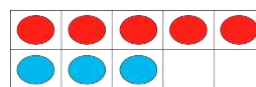
**Any web links, images etc.**

**NCETM Spine Materials 1.4** <https://www.ncetm.org.uk/classroom-resources/primm-1-04-composition-of-numbers-6-10/>

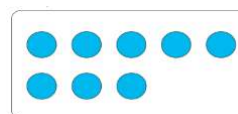
Numberblocks – transforming into different shapes and numbers

Subitising <https://nrich.maths.org/14004>

\_\_\_\_\_ is five and \_\_\_\_\_ more



\_\_\_\_\_ is the whole \_\_\_\_\_ is a part and \_\_\_\_\_ is a part



Which is larger?

Which is smaller?

