## Stomp-Tap-Clap-Snap: A Game for Promoting Conceptual Place Value and Listening Skills

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#### INTRODUCTION

As part of our work with the South African Numeracy Chair Project we often engage with international academics and educators. We recently had the opportunity to spend time with Dr Ravi Subramaniam from the Homi Bhabha Centre for Science Education (HBCSE) in Mumbai (India) who shared this game with us. His version (included in his Grade 3 workbook) is called **TAP-CLAP-SNAP** and works with numbers up to 999. We immediately tried the game in some of our after-school maths clubs. The game worked very well and I decided to extend it to include numbers in the thousands in order to give it more scope for different grades. In this article I share some of the ways of using this simple yet effective game in the classroom.



#### WHY USE THIS GAME?

This is an interactive game which can be used with the whole class or groups of learners as a mental starter in a maths session. Learners can also play it in pairs by making sequences for each other to work out. The structure of the game means that it can be used effectively from Grade 2 up to at least Grades 5 and 6, and perhaps further if learners are struggling with the concept of place value. It is a good way for learners to conceptualise expanded notation in place value without really thinking of it as "expanded notation". Early learners can benefit from the game as a way of encouraging *'counting on*' skills. For example, if you do **CLAP, SNAP, SNAP, SNAP, snAP**, they can count on from "10" (**CLAP**) in ones: "11" (**SNAP**), "12" (**SNAP**), "13" (**SNAP**).

#### **EXAMPLE ACTIVITIES**

Here are some examples of how we have used this game in our after-school maths clubs. The numbers in the brackets indicate the number represented by the sequence and are for the teachers' reference only.

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#### **BEGINNING ACTIVITIES**

• Identifying numbers and 'counting on' skills

CLAP, SNAP, SNAP, SNAP, SNAP (14) TAP, TAP, CLAP, CLAP, CLAP, SNAP, SNAP (232) STOMP, TAP, TAP, TAP, TAP, CLAP, CLAP, SNAP (1431)

• Adding/subtracting 10 and adding/subtracting 100

Given CLAP, CLAP, CLAP, SNAP (31) add 10 Given TAP, TAP, CLAP, CLAP, SNAP, SNAP (222) subtract 10 Given TAP, TAP, TAP, CLAP, CLAP, SNAP (321) add 100 Given TAP, TAP, CLAP, CLAP, SNAP, SNAP (223) subtract 100

• Working with operations

For this activity begin by writing the suggested number (or something similar) on the board. Given 35 add **SNAP, SNAP, SNAP** (3) Given 29 subtract **CLAP, SNAP, SNAP** (12) Given 15 multiply by **SNAP, SNAP, SNAP, SNAP** (4) Given 100 divide by **TAP** (10)

#### More challenging activities

These activities promote careful listening skills and take the game beyond place value into working mentally with place value and operations. To add another level of interest, when someone has an answer get them to make the sequence for the answer.

Given STOMP, STOMP, TAP, CLAP, CLAP, CLAP, SNAP, SNAP (2132) add TAP, TAP (200) Given STOMP, TAP, TAP, TAP, CLAP, CLAP, SNAP (1321) subtract TAP, TAP (200) Given CLAP, CLAP, SNAP, SNAP, SNAP, SNAP (25) multiply by SNAP, SNAP, SNAP (3) Given CLAP, CLAP, CLAP, SNAP, SNAP (32) divide by SNAP, SNAP (2)

#### **CONCLUDING COMMENTS**

The learners in our clubs enjoyed this game even though it meant they had to be extra quiet in order to hear and work out the numbers! I have also incorporated the basic idea into other activities since once the learners know how the system works it can be used in other contexts. Try the game yourself and adapt it to see if it will work in your classroom. I would love to have your feedback and to hear about any variations you may have come up with.

For more of Dr Subramaniam's primary maths resources, visit his website: http://mathedu.hbcse.tifr.res.in/resources/resources-for-teachers

For more information on the SANC Project after-school maths clubs visit: http://www.ru.ac.za/sanc/mathsclubs/

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