



Stages of Learning Record Keeping

These sheets were developed for a Kindergarten/Grade One class where most of the students arrived unable to count to ten and only a few students could count past ten.

As it was obvious that even the students who could count to ten had no idea what the numerals actually meant, the first goal was to teach 'subitization', which is knowing how many the amount presented is without having to count. A student should be able to subitize any amount from 1 to 10, provided the amount is organized into a pattern by using a ten-frame, a die, or an array.

For example, the number 7 must be counted in *Figure 1*, but can be subitized in *Figures 2, 3* and *4* by using the ten-frame in *Figure 4*, the relative size of 3 and 4 in *Figure 2*, and the familiar dice shape of 6 and 1 in *Figure 3*:



The Stages that a student must go through are as follows:

- Stage 1** – This stage involves **assessing** and **recording progress** on **eight subitization games** and has an assessment activity for ordering cards, connecting numerals to numbers and subitizing without hesitation. It is not necessary that each student learn all eight games – some students will know all the numbers after playing only one game. Eight games are presented so that students have a mixture of experiences and maintain interest through variety.
- Stage 2** – This stage involves **assessing** and **recording progress** using the **Fact Family Sheets** for **adding** and **subtracting** and recording the ability to add without fingers or counting, and to use the following patterns: **friendly numbers to ten**, **adding 1**, **adding 2**, and **adding 5**. Again, there is no specific pattern, although many children first learn **adding 1**, while others first learn their '**friendly numbers**'. Learning how to **add 2** usually follows learning how to **add 1**. Learning how to **add 5** is visual using ten-frames and may be learned first or last depending on the student.
- Stage 3** – This stage involves **assessing** and **recording progress** using the **All the Facts Sheets** (facts to 18) for **adding** and **subtracting** and recording the ability to add without fingers or counting, and to use the following patterns: **friendly numbers to ten**, **adding 1**, **adding 2**, and **adding 5**, **adding 9**, **adding 8**, **adding doubles**, **adding doubles plus or minus one**. Again, it is important not to be seduced into feeling there is a logical order. For some, the visual patterns are compelling and easy; for others they are more difficult.



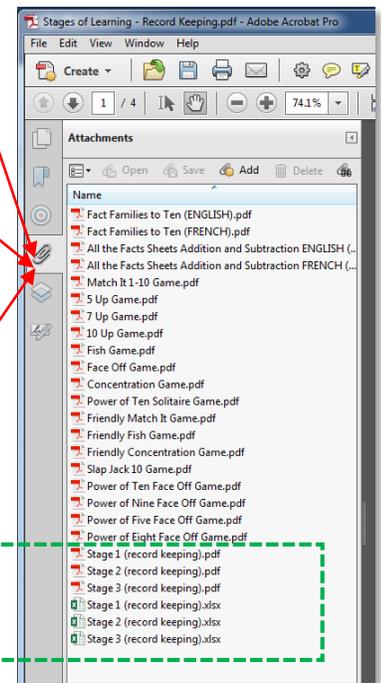
Stages of Learning

Record Keeping – file access

Stage I	Subitization Games						
Name	Match It 1-10	Five Up	Seven Up	Ten Up	Fish	Face Off	Concentration

Stage 2	Subitization Games				
Name	Using Fact Family Sheets +, -	Friendly Match It	Friendly Fish	Friendly Concentration	Slap Jack Ten

Stage 3	Subitization Games				
Name	Using All the Facts Sheets +, -	Power of Ten Face Off	Power of Nine Face Off	Power of Five Face Off	Power of Eight Face Off



Files for the **Fact Family Sheets** (both English and French formats),
 the **All the Facts Sheets** (both English and French formats),
 the **games** listed for Stage 1, Stage 2 and Stage 3 record sheets are easily accessed/opened
 by 'clicking' on the file name listed in the 'Linked Files Master' folder on the Teachable Moments Manual.
Printable Stage 1, Stage 2 and Stage 3 Record sheets can be downloaded for free at www.poweroften.ca