



Choosing the most appropriate NumberSense Workbook for a child

Children will benefit most from the NumberSense Workbook Series if they start with the workbook that matches their stage of number sense development. In that way they will be able to work confidently and independently through the workbook.

The workbooks are developmental in nature. Each workbook builds on the concepts and skills developed in the previous workbook. To gain as much as possible from the workbook series children should work through the materials in the sequence that they appear in the workbook.

To help you choose the NumberSense Workbook that is most appropriate for a particular child; three sample pages are available for each of the 26 workbooks in the series. These sample pages are available in all of the languages that the booklets have been translated into. The purpose of these sample pages is to assist you to decide on the first workbook that a child will start working in.

Using the sample pages to choose the most appropriate workbook for a child

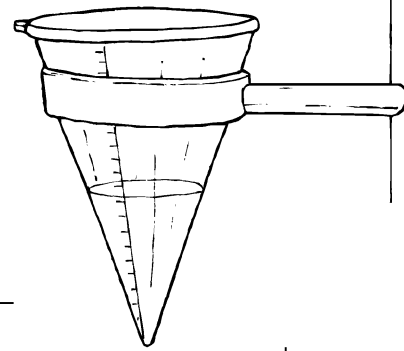
Use the *NumberSense Workbook Grade Guide* at www.NumberSense.co.za to determine the ideal workbook for a child based on their Grade and the time of the year. Then:

- Start with the sample pages from the workbook at least four workbooks before the ideal one.
- Let the child work through these pages by him/herself.
 - If the child finds the activities on the pages too easy (and gets all the answers correct); repeat the exercise with the sample pages from the next workbook.
 - If the child struggles with the pages then repeat the exercise with the sample pages from an earlier workbook in the series.

The best initial workbook for a child is the workbook before the one in which the child starts to struggle.

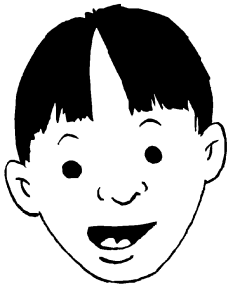
Having decided on an initial workbook for a child let him/her work through that workbook and those that follow at a pace of at least one page per day.





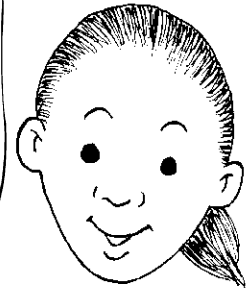
1. In Stellenbosch, Thabo recorded 16,2 mm of rain on Saturday and 22,6 mm on Sunday. How much rain did Stellenbosch get altogether on those two days?

In Mophela, Andries recorded 34,6 mm of rain on Saturday and 23,7 mm on Sunday. How much rain did Britstown get altogether on those two days?



$34,6 + 23,7$
I break up both numbers
and add the parts.
 $34 + 23 = 57$ and
 $0,6 + 0,7 = 1,3$ then
 $57 + 1,3 = 58,3$ mm.

$34,6 + 23,7$
I break up the second
number only and then
add.
 $34,6 + 23 = 57,6$ then
 $57,6 + 0,7 = 58,3$ mm.

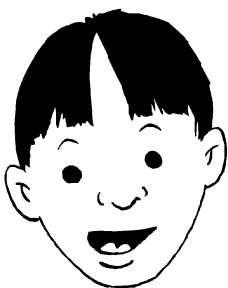


2. Use “breaking up” and “adding the parts” strategies to calculate.

- | | | |
|--------------------------|--------------------------|--------------------------|
| a. $21,4 + 30,2 =$ _____ | e. $14,7 + 25,2 =$ _____ | i. $16,8 + 22,9 =$ _____ |
| b. $25,3 + 14,5 =$ _____ | f. $15,6 + 32,3 =$ _____ | j. $64,3 + 23,8 =$ _____ |
| c. $12,4 + 36,5 =$ _____ | g. $24,8 + 16,2 =$ _____ | k. $51,5 + 24,7 =$ _____ |
| d. $21,5 + 37,2 =$ _____ | h. $31,5 + 36,5 =$ _____ | l. $43,7 + 31,8 =$ _____ |

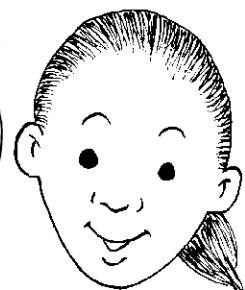
3. On Monday Pat ran 3,5 km, on Wednesday she ran 1,3 km and on Friday she ran 2,2 km. How many kilometres did she run altogether?

On Monday Soso ran 2,4 km, on Wednesday she ran 2,7 km and on Friday she ran 3,6 km. How many kilometres did she run altogether?



$2,4 + 2,7 + 3,6$
I add the parts like this:
 $2 + 2 + 3 = 7$ and
 $0,4 + 0,7 + 0,6 = 1,7$
then $7 + 1,7 = 8,7$ km.

$2,4 + 2,7 + 3,6$
I add the parts like this:
 $2,4 + 2 + 0,7 = 5,1$ and
 $5,1 + 3 + 0,6 = 8,7$ km.



4. Use “breaking up” and “adding the parts” strategies to calculate.

- | | |
|------------------------------|--------------------------------|
| a. $1,3 + 2,1 + 4,3 =$ _____ | d. $2,2 + 3,6 + 2,9 =$ _____ |
| b. $2,4 + 3,2 + 5,3 =$ _____ | e. $13,8 + 2,1 + 4,4 =$ _____ |
| c. $1,6 + 2,3 + 4,5 =$ _____ | f. $17,1 + 5,3 + 10,7 =$ _____ |



- The diagram illustrates two parallel processing units. The left unit takes five inputs (36, 42, 48, 72, 120) and processes them through a division by 6, followed by a multiplication by 5, resulting in five outputs. The right unit takes three inputs (24, 60, 180) and processes them through a division by 12, followed by a multiplication by 7, resulting in five outputs, with the third output being 70 and the fifth output being 140.

- $\frac{5}{6}$ of 36?

- $\frac{5}{6}$ of 48?


- $\frac{5}{6}$ of 120?

- $\frac{5}{6}$ of 96?

- $\frac{5}{6}$ of 6?

- $\frac{7}{12}$ of 60?

- $\frac{7}{12}$ of 120?

 $\frac{7}{12}$ of 180?

- $\frac{7}{12}$ of 96?

- $\frac{7}{12}$ of 30?

- $\boxed{\frac{1}{48}} + \frac{3}{8} \Rightarrow \boxed{} + \frac{1}{2} \Rightarrow \boxed{5} \Rightarrow \boxed{\frac{3}{45}} - \frac{1}{5} \Rightarrow \boxed{} - \frac{3}{5}$

$\boxed{} \xleftarrow{+\frac{1}{8}} -\frac{6}{8} \xleftarrow{-\frac{3}{8}} \boxed{} \xleftarrow{+\frac{1}{2}} \boxed{} \xleftarrow{+\frac{1}{5}} \boxed{} \xleftarrow{+\frac{3}{10}} \boxed{} \xleftarrow{3}$

3 $+$ $\frac{3}{4}$ \Rightarrow $+$ $\frac{2}{8}$ \Rightarrow $-\frac{7}{10}$ \Rightarrow $-\frac{7}{10}$ \Rightarrow $-\frac{3}{5}$ \Rightarrow 2

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1. When you cook rice, you boil one cup of rice in two cups of water. If you use too little water, the rice will be underdone, and if you use too much water the rice will be soggy. Andy has to prepare rice for his guests. Say what will happen in each case.

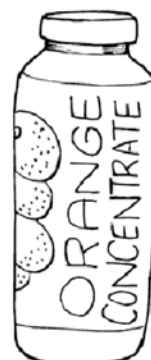
Cups of rice	Cups of water	Underdone/just right/soggy
4	6	
7	14	
5	12	
3	7	
2	3	

2. Vusi mixes cooldrink concentrate with water to make cooldrink.

First mixture: 3 cups of concentrate and 6 cups of water.



Second mixture: 4 cups of concentrate and 10 cups of water.



Which mixture will taste stronger?



Thandi

The second mixture tastes stronger, since it has more concentrate than the first mixture does.

The first mixture will taste stronger. In the first mixture there are twice as many cups of water as concentrate. In the second mixture there are more than twice as many cups of water as concentrate.



Ferial

- Who is correct? Explain.
- Which mixture is stronger?
2 cups of concentrate and 6 cups of water or
3 cups of concentrate and 9 cups of water.
- Which mixture is stronger?
4 cups of concentrate and 8 cups of water or
6 cups of concentrate and 18 cups of water.