



## 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](http://www.NumberSense.co.za) to determine the ideal workbook for a child based on their Grade and the time of the year. Then:

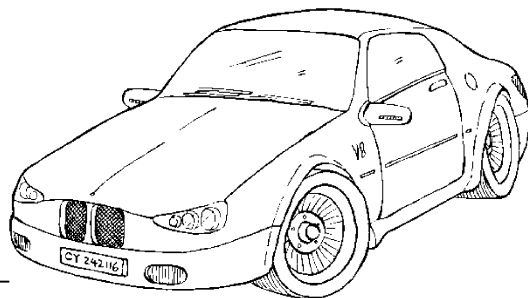
- Start with the sample pages from the workbook at least four workbooks before the ideal one.
- Let the child work through these pages by him/herself.
  - If the child finds the activities on the pages too easy (and gets all the answers correct); repeat the exercise with the sample pages from the next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

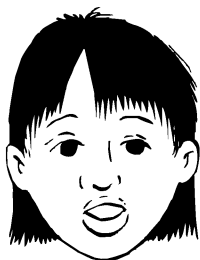
Having decided on an initial workbook for a child let him/her work through that workbook and those that follow at a pace of at least one page per day.



1. Mr Twala paid R842 for 4 new tyres. How much did each tyre cost?



Mandela High School raised R8 480 to give to charity. The money was shared equally among 4 charities. How much did each charity get?



$R8\ 480 \div 4$   
I halve 8 480 and then halve again.  
Half of 8 480 is 4 240, and  
half of 4 240 is 2 120.  
Each charity gets R2 120.



Adila uses a halving strategy to divide by 4.

2. Use a “halving” strategy to calculate.

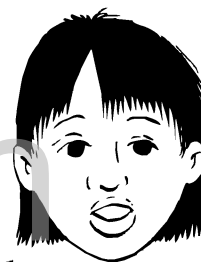
- |                         |                            |                            |
|-------------------------|----------------------------|----------------------------|
| a. $64 \div 4 =$ _____  | e. $236 \div 4 =$ _____    | i. $2\ 420 \div 4 =$ _____ |
| b. $96 \div 4 =$ _____  | f. $312 \div 4 =$ _____    | j. $4\ 208 \div 4 =$ _____ |
| c. $104 \div 4 =$ _____ | g. $2\ 200 \div 4 =$ _____ | k. $6\ 424 \div 4 =$ _____ |
| d. $448 \div 4 =$ _____ | h. $1\ 612 \div 4 =$ _____ | l. $4\ 604 \div 4 =$ _____ |

The Education Department shared 4 872 books equally among 8 school libraries. How many books did each library receive?



Adila, can you use the same strategy to divide by 8?

Yes I can.  $4\ 872 \div 8$   
I halve 4 872 and then halve again and halve again.  
Half of 4 872 is 2 436, and  
half of 2 436 is 1 218, and  
half of 1 218 is 609 books.



3. Use a “halving” strategy to calculate.

- |                         |                            |                            |
|-------------------------|----------------------------|----------------------------|
| a. $168 \div 8 =$ _____ | e. $416 \div 8 =$ _____    | i. $5\ 816 \div 8 =$ _____ |
| b. $224 \div 8 =$ _____ | f. $2\ 600 \div 8 =$ _____ | j. $4\ 912 \div 8 =$ _____ |
| c. $368 \div 8 =$ _____ | g. $4\ 112 \div 8 =$ _____ | k. $5\ 688 \div 8 =$ _____ |
| d. $648 \div 8 =$ _____ | h. $4\ 200 \div 8 =$ _____ | l. $6\ 416 \div 8 =$ _____ |

1. A truck used to transport bags of wheat weighs 4 500 kg. A bag of wheat weighs 50 kg.

- a. Complete the tables to help you calculate how much the different loads of wheat weigh.

No. of bags of wheat	1	2	3	4	5	6	7	8	9
Bags (kg)									

No. of bags of wheat	10	20	30	40	50	60	70	80	90
Bags (kg)									

- b. How much will these bags weigh?

- 20 bags
- 48 bags
- 84 bags

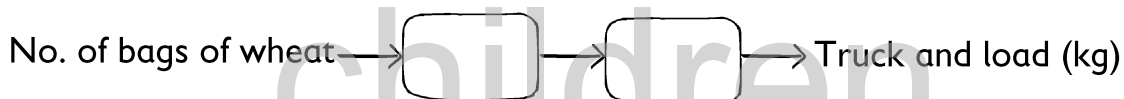
- c. How much will the truck weigh if it is loaded with 48 bags?

- d. Complete the table.

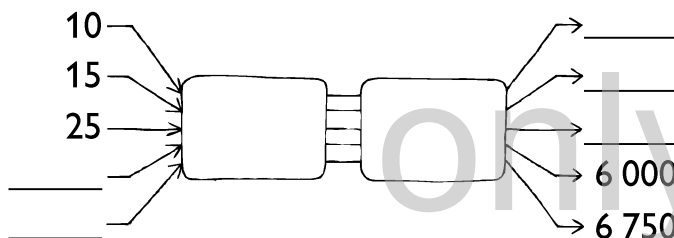
No. of bags of wheat	20	35	42	54	65	72	82	90	100
Truck + Bags (kg)			6600						9500

2. A flow diagram can be used to calculate how much the truck and load will weigh.

- a. Complete the flow diagram.



- b. Complete to calculate how much the truck and load will weigh.



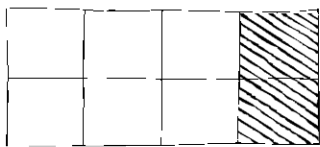
- c. How many bags of wheat are there on the truck if the truck and load weigh:

- 5 000 kg?
- 4 750 kg?
- 5 300 kg?

- d. Describe how you calculated the answers to c.

1. Write different fractions to describe the shaded portion of each figure.

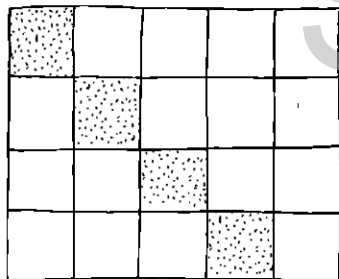
One possibility has been provided.



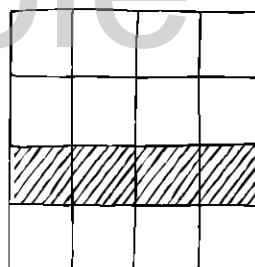
a.  $\frac{2}{8}$  or  $\frac{1}{4}$



c. \_\_\_\_\_ or \_\_\_\_\_



b. \_\_\_\_\_ or \_\_\_\_\_ or \_\_\_\_\_



d. \_\_\_\_\_ or \_\_\_\_\_

2. Look at the drawings for question 1, and then complete.

a. Half of  $\frac{1}{4}$  = \_\_\_\_\_

c. A quarter of  $\frac{4}{20}$  = \_\_\_\_\_

b. Half of  $\frac{1}{9}$  = \_\_\_\_\_

d. A half of  $\frac{2}{8}$  = \_\_\_\_\_

3. Themba and Xolile buy ordinary candles at the supermarket. They melt the candles and make fancy candles from the wax. They make two different fancy candles.

- A large round candle is made from  $1\frac{1}{4}$  of an ordinary candle.
- A large square candle is made from  $1\frac{3}{5}$  of an ordinary candle.

- a. How many ordinary candles do they need to buy to make 15 large round candles and 15 large square candles?

- b. How many large round candles can they make if they have one packet with 25 ordinary candles?

- c. How many large square candles can they make if they have one packet with 25 ordinary candles?

