



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

## **NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P1**

**NOVEMBER 2010 (1)**

**MARKS: 200**

**TIME: 3 hours**

**This question paper consists of 18 pages and a separate information sheet.**

**INSTRUCTIONS AND INFORMATION**

1. Owing to the nature of this three-hour examination, it is important to note that you will NOT be permitted to leave the examination room before the end of the examination period.
2. Type your examination number in the header of EVERY document that you create or save.
3. The invigilator will give you a disk containing all the files needed for the examination OR you will be told where the files can be found on the network or computer. If a disk has been issued to you, you must write your centre number and examination number on the label. If you are working on the network, you must follow the instructions provided by the invigilator.
4. A copy of the master files will be available from the invigilator. Should there be any problems with a file or files, you may request another copy from the invigilator.
5. This question paper consists of SEVEN questions.
6. Answer ALL the questions.
7. Ensure that you save each document using the file name given in the question paper. Save your work at regular intervals as a precaution against possible power failures.
8. Read through each question before answering or solving the problem. Do NOT do more than is required by the question.
9. At the end of the examination you must hand in the disk given to you by the invigilator with ALL the files saved on the disk, OR you should make sure that ALL the files are saved on the network/computer as explained to you by the invigilator/teacher. Make absolutely sure that all files can be read.
10. The separate information sheet which has been provided with the question paper **MUST BE COMPLETED AFTER THE THREE-HOUR EXAMINATION SESSION**. Hand it to the invigilator at the end of the examination.
11. During the examination you may make use of the help functions of the programs which you are using. You may NOT use any other resource material.
12. If data is derived from a previous question that you could not answer, you should still proceed with the questions that follow.
13. Unless instructed otherwise, formulae and/or functions must be used for ALL calculations in spreadsheet questions. Absolute cell references must be used only where necessary to ensure that formulae are correct when they are copied to other cells in the spreadsheet.

14. In all word processing questions, the language should be set to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise.
15. The examination folder/data disk that you receive with this question paper, will contain the folder and all the files listed below. Ensure that you have the folder and all the files before you begin this examination.

A folder called **Question1\_Vraag1**

and files called:

- |                          |                      |
|--------------------------|----------------------|
| • 1Answer_Antwoord       | Word processing file |
| • 2Games_Speletjies      | Word processing file |
| • 2Motivation_Motivering | Word processing file |
| • 2Picture_Prentjie      | Picture/Image file   |
| • 2Poster_Plakkaat       | Word processing file |
| • 3News_Nuus             | Word processing file |
| • 3Stats_Statistiek      | Spreadsheet file     |
| • 4Fun_Pret              | Spreadsheet file     |
| • 6FunDay_PretDag        | Database             |
| • 6Help_Hulp             | Spreadsheet file     |
| • 7Calculate_Bereken     | Spreadsheet file     |
| • 7Cash_Kontant          | Word processing file |
| • 7Thanks_Dankie         | Word processing file |

**SCENARIO**

Your school has decided to hold an annual fun day to raise funds to improve the computer centre. Each class will be responsible for different activities on the fun day.

Activities include:

- Jumping castle
- Horse rides
- Face painting
- LAN games
- Math Magic

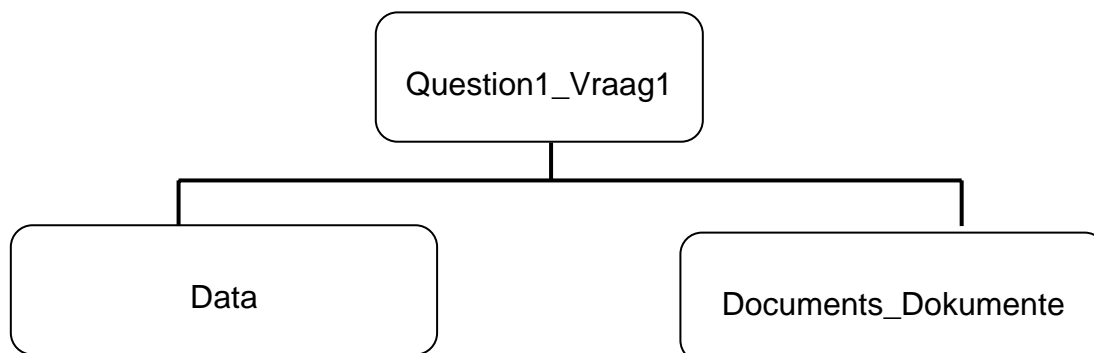
All data and information are computerised and the CAT learners will assist with various computer-related tasks, such as:

- Creating publications
- Making summaries of donations
- Reporting on the activities of the fun day
- Sending letters

The computers have been loaded with all the relevant software, namely an operating system and an office-suite application program.

**QUESTION 1**

The folder structure below has been created.



- 1.1 Rename the folder called **Data** as **2010**. (1)
- 1.2 Set the title or subject property of the **Day\_Dag** file to show as your examination number. (1)
- 1.3 Create a shortcut in the **Question1\_Vraag1** folder which links to the file called **Agenda** in the **Documents\_Dokumente** folder. (2)
- 1.4 Save the file **Logo** as a document template in the **Question1\_Vraag1** folder. (1)
- 1.5 The file **Indaba** has been protected with the password 123. Save the **Indaba** file without a password. (1)
- 1.6 Move all the presentation files from the **Documents\_Dokumente** folder to the **Question1\_Vraag1** folder. (2)
- 1.7 Open the file **1Answer\_Antwoord**.  
Type your examination number in the space provided in the document.  
Determine the number of words in the file **Day\_Dag**. Type your answer in the space provided in the **1Answer\_Antwoord** file. (1)
- 1.8 Sort the files in the **Question1\_Vraag1** folder by type. Paste a screen shot/screen dump showing only the folder/file name and type fields, in the space provided in the **1Answer\_Antwoord** file. (4)
- Save and close **1Answer\_Antwoord**. [13]

**QUESTION 2**

2.1 CAT learners were asked to design a poster to advertise the fun day.

Open the file **2Poster\_Plakkaat**.

Type your examination number in the header of the document.

The example below shows what the advertisement should look like when it is completed.



2.1.1 Format the WordArt/Text Art/Fontwork at the top of the page as follows:

- Change the outline to a 3 pt dotted line.
- Rotate the text and position it roughly in the centre of the page, as shown in the example.

(4)

2.1.2 Change all the bulleted text to a yellow font colour.

(1)

2.1.3 Customise the bullets using the image **2Picture\_Prentjie**



(1)

2.1.4 Copy the image from the file **2Games\_Speletjies** and paste it in the poster.

- Format the image/picture so that it displays in colour and not in black and white.
- Resize the image/picture so that it is a background to the text and fills the whole page.

(4)

2.1.5 Space the text to resemble the example shown. Make sure that it fits on one page.

(2)

Save **2Poster\_Plakkaat** and close the document.

2.2 CAT learners were asked to help with the formatting of a document for the parents.

Open the file **2Motivation\_Motivering**.

Type your examination number in the header of the document.

2.2.1 Apply the *Heading 1* style to the title, '*Why should we install more computer centres at our school?*', in line 1. (1)

2.2.2 Modify the style *Special Heading* by removing the border around the text. Apply the change to all the occurrences of this style. (2)

2.2.3 Create a new style called *NewHeading* based on the *Heading 2* style. The style properties must be set so that the text appears in italics. (3)

2.2.4 Change the font colour of every occurrence of the acronym '*ICT*' in the document to a blue font.

HINT: Use the find and replace function. (2)

2.2.5 Add a footnote linked to the text '*Read the following extract*' in line 18. The footnote should be referenced with a custom symbol of your choice. The footnote should read '*Published 2000*'. (3)

2.2.6 Apply any light shading (not yellow) to the text of the first extract starting with the words '*The true value*' (in line 21 of page 1) and ending with '*as a cognitive tool*'. (2)

2.2.7 Add a bookmark called '*Ref*' to the word (NCS) that appears on page 2. (2)

2.2.8 Hyperlink the word '*subject*' on page 2 to the bookmark called '*tools*'. (2)

2.2.9 Use a page break to add a new (blank) page at the beginning of the document. (2)

2.2.10 Add a page border so that it only appears on the first page of the document. (2)

2.2.11 Insert automatic page numbering (in any format) in the footer of each page. The page numbers must appear from page 2, starting with number 1. For example, the second page must be numbered page 1, et cetera. (4)

Save **2Motivation\_Motivering** and close the document. [37]

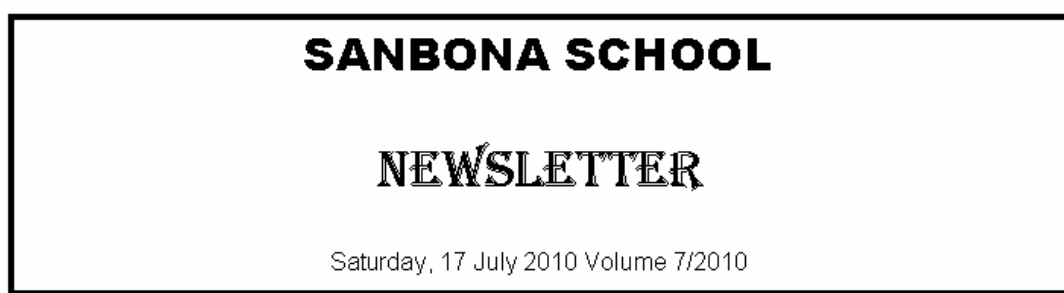
**QUESTION 3**

Sanbona School has decided to send a newsletter to the parents to inform them of events on the fun day. The newsletter has been created, but needs some formatting before it is distributed.

Open the file **3News\_Nuus**.

Type your examination number in the header of the document.

- 3.1 Create a letterhead for the newsletter. Study the example below before carrying out the instructions that follow.



- 3.1.1 Place a 3 pt shadowed paragraph border around the letterhead. (2)
- 3.1.2 Insert the current date that will update automatically to the left of 'Volume 7/2010', using the same format as shown in the example above. (2)
- 3.1.3 Centre the text as shown in the example above. (1)
- 3.2 Change the paragraph spacing of the rest of the document, after the letterhead, so that there is a 6 pt paragraph spacing after each paragraph. (2)
- 3.3 Locate the text '1st prize' that appears in the paragraph under the heading 'RAFFLE LISTS AND LUCKY DRAWS' in the second column on page 2. Use a font effect so that the text appears as '1<sup>st</sup> prize'. (1)
- 3.4 Locate the image of the hamper of food on page 2.
- 3.4.1 Resize the image to be exactly 4 cm/1.57" high and 5 cm/1.97" wide. (2)
- 3.4.2 Place the caption 'Figure 1 Hamper won by Mandy Dlamini' below the image. (2)



3.5 A graph needs to be added to the document.

3.5.1 Copy the graph from the spreadsheet **3Stats\_Statistiek** and place this graph below the heading '*MEDICAL INFORMATION*' on page 3.

The graph must update automatically in the document when the graph in the spreadsheet is changed. (2)

3.5.2 Place only the page containing the graph in landscape format. (3)

3.6 Format the text under the heading '*IMPORTANT DATES*' on the last page, as shown in the example below:

#### **IMPORTANT DATES**

17 October	Budget Meeting Presentation and Fun Day
24 October	Vocational training and transition planning meeting for parents
29 October	Swimming gala
9 November	Christmas play
12 November	School leavers function

3.6.1 Use an appropriate tab setting at 3.5 cm/1.38" to align all the events listed to the right of the five dates. (3)

3.6.2 Use indentation and paragraph formatting to indent and space the first two events, as shown in the example above.

Make sure that no other formatting or spacing is changed. (3)

Save **3News\_Nuus** and close the document. [23]

**QUESTION 4**

A spreadsheet was set up by the organisers of the fun day.

Open the spreadsheet **4Fun\_Pret**. Work in the **LAN** worksheet.

Type your examination number in cell H2 of the **LAN** worksheet.

- 4.1 Visitors and learners can pay to play computer games on the LAN. They may enter as individuals or as members of a team.

4.1.1 Merge cells A1 to G1. (1)

4.1.2 Fill the merged cells with a dotted pattern on a coloured background, like the example shown below.



(2)

4.1.3 Wrap the text in cell J1. (1)

4.1.4 Add a function in cell K3 to determine the total of the *Fees* in column G. (2)

4.1.5 Apply conditional formatting to column F so that the word '*Master*' displays in a red font colour. (3)

4.1.6 Add a function in cell D3 to determine the GamelD of the participant. The code is a string (text) obtained by combining the following:

- The last two letters of the surname; followed by
- the initial (first letter of the name); followed by
- the number of the participant.

For example, participant number 19, Faith BUYS, would have a GamelD of YSF19. (6)

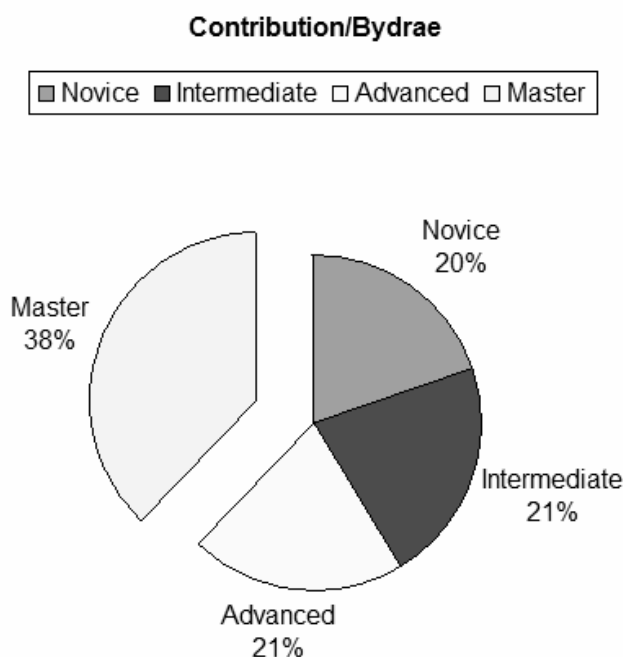
4.1.7 A function has been added in cell J3 to choose a random number representing the *Player number* of a player from column A. This player will win a prize. No changes must be made to cell J3.

In cell K4, use a lookup function based on the *Player number*, displayed in cell J3, to display the surname of the winner. (4)

4.2 Work in the **Summary\_Opsomming** worksheet.

Competitors can take part in the competition either as individuals or as part of a team of 15 members.

- 4.2.1 Add a function in cell B4 to count the number of participants who want to be part of a team in the competition. These participants are indicated with a "Y" in column E of the LAN worksheet. (3)
- 4.2.2 Add a formula in cell B5 to determine the number of complete teams (with 15 members) that can be entered in the competition. Your answer must be a whole number. (3)
- 4.2.3 Format cells C8 to C11 to display the amounts in South African rand, with two decimal places. (1)
- 4.2.4 Create a chart/graph to show the proportion of funds raised by each of the four groups (cells C8 to C11).
- Position the graph in row 15 below the data.
  - Use the formatting and layout options shown in the example below.



(8)

Save **4Fun\_Pret**.**[34]**

**QUESTION 5**

As part of the fun day, a mathematics competition is held. Learners get 50 sums to complete in a maximum time of 1 hour. The winner will be the one to have the most sums correct in the shortest time.

Work in the **Maths Magic** worksheet in the **4Fun\_Pret** spreadsheet.

- 5.1 Change the alignment of the headings in row 2 to vertical. Adjust the row height so that the text is easy to read. (2)
- 5.2 Centre the headings in row 2 horizontally and align the contents to the bottom of each cell. (2)
- 5.3 Enter a formula in cell E3 to calculate the number of minutes taken for *Kim Adam* to do all the sums, using the start and end times in column C and column D respectively. (3)
- 5.4 Each learner gets 50 questions to answer.  
Enter a formula in cell G3 to calculate the percentage of questions that *Kim Adam* answered correctly. (3)
- 5.5 Enter a formula in cell J4 to calculate the average score obtained by all the learners (found in column G). Round your answer down to the nearest whole number. (4)
- 5.6 Enter a formula in cell J5 to calculate the score that the majority of learners obtained, that is the most common score. (2)
- 5.7 Enter a function in cell J6 to calculate the highest score (percentage) obtained in the competition. (2)
- 5.8 Enter a function in cell J7 to determine the second highest score (percentage) obtained in the competition. (3)
- 5.9 Enter a function in cell J8 to determine the time in which the fastest learner completed his or her 50 questions, not taking into account the number of sums he or she had correct. (2)
- 5.10 The winner is the learner who had the most answers correct. Should more than one learner have the *same* highest score, the winner is the learner (of those who tied for the highest score) who took the least amount of time to answer the questions.  
Use any method at your disposal to determine the winner. Type the name and surname of the winner in cell J9. (2)

Save **4Fun\_Pret** and close the document.

**[25]**

**QUESTION 6**

6.1 The organisers of the fun day need a database of all the stalls.

Open the database **6FunDay\_PretDag**, and open the table **Stalls\_Stalletjies** in design view.

6.1.1 Change the field properties of the **Convenor\_Sameroeper** field to limit the input to 25 characters. Make sure that the field cannot be left blank. (2)

6.1.2 Change the field type of the **Number\_Nommer** field to an appropriate data type so that it can store a cellphone number such as 0821231234. (1)

6.1.3 Use an input mask on the field **Number\_Nommer** to make sure that only 10 digits (numbers) will be entered. (2)

6.1.4 Set the field type of the **Funds\_Fondse** field to display as South African rand. (1)

6.1.5 The **Sponsorship\_Borgskap** field indicates whether the stall received a sponsorship or not.  
  
Change the field type to an appropriate data type to accommodate this type of input. (1)

6.1.6 Set a validation rule on the field **Type\_Tipe**, so that the user can only enter the words '*Food*', '*Games*' or '*Retail*'. (2)

6.1.7 Set a property of the **Type\_Tipe** field so that a suitable message will appear if the incorrect data is entered in the **Type\_Tipe** field. (2)

Save changes to the table **Stalls\_Stalletjies** in the database **6FunDay\_PretDag**.

- 6.2 The database **6FunDay\_PretDag** contains a table called **Sponsors\_Borge** with details of all the sponsors and donors for the fun day.

The table **Sponsors\_Borge** contains the following fields:

<b>Name_Naam</b>	Name of business/NGO or private person who gave donations or sponsorships
<b>Contact_Kontak</b>	Surname of the contact person
<b>Contact Name_Kontaknaam</b>	Name of the contact person
<b>Number_Nommer</b>	Cellphone number of the contact person
<b>Type_Tipe</b>	The type of concern, either a business, NGO or private person who made the donation
<b>Value_Waarde</b>	The monetary value of a donation
<b>Amount_Bedrag</b>	The amount of a sponsorship
<b>Item</b>	The item that was donated

- 6.2.1 Create a query called **List of Sponsors** that will show the names, surnames and cellphone numbers for all the contact persons of people/businesses that gave sponsorships to the school. Sort the records in the query, firstly according to surname and then according to name. (4)
- 6.2.2 Create a query called **Invite** that contains all the fields of the sponsors' details. Show the details of sponsorships of R500 or larger, or of donations of prizes for the fun day. (4)
- 6.2.3 Open the query called **Totals\_Totale**.  
  
Change the query so that the number of items that were donated is displayed. (2)
- 6.2.4 The school wishes to donate 10% of each amount received to charity.  
  
Open the query **Charity\_Liefdadigheid**. Create a new field called **Charity** that will calculate 10% of each amount donated to the school. (4)
- 6.3 Create a form called **Input\_Toevoer** based on the table **Stalls\_Stalletjies**, showing all the fields of the table. (2)

- 6.4 A form was created and must be changed. Open the **Manage\_Bestuur** form.
- 6.4.1 Add the text '*Stalls*' to the form header. (2)
- 6.4.2 Change the background colour of the whole form to yellow. (1)
- 6.4.3 Remove the horizontal line between the Header and Detail sections of the form. (1)
- 6.5 Open the report **Donations\_Skenkings** and change the formatting as follows:
- 6.5.1 Change the title of the report to '*Smaller Gifts*'. (1)
- 6.5.2 Change the properties of the picture control on the report so that the whole picture is displayed properly. (1)
- 6.5.3 Change the picture so that it appears only at the top of each new page of the report. (1)
- 6.5.4 Change the appearance of the text box containing the surname of the contact person so that it resembles the other text boxes in the report. (1)
- 6.6 The principal needs a report of the funds already raised from donations.
- 6.6.1 Create a report in landscape format called **FundsIn\_Vondseln** in the database **6FunDay\_PretDag** based on the table **Sponsors\_Borge**. (2)
- 6.6.2 Group the report according to the type of donor (use the **Type\_Tipe** field). (2)
- 6.6.3 Display the average amount of money donated by each group (use the **Amount\_Bedrag** field). (3)
- 6.6.4 Display the total funds raised from donations at the end of the report. (3)
- 6.7 The spreadsheet **6Help\_Hulp** has a list of the volunteers to help at the stalls.
- Use this data to create a database table saved as **Helpers** in the **6FunDay\_PretDag** database. (3)
- Save and close the database. [48]

**QUESTION 7**

7.1 Each stall will apply for petty cash from the organisers of the fun day.

The organisers wish to design a form to collect petty cash in such a way that it will prevent errors and will include an automatic calculator.

You need the following files to answer this question:

- **7Calculate\_Bereken**
- **7Cash\_Kontant**

Open the file **7Cash\_Kontant**.

Key in your examination number in the header of the document.

Study the example below before carrying out the instructions that follow.

APPLICATION FOR PETTY CASH/AANSOEK VIR KLEINGELD							
Name of stall/Naam van stalletjie	<input type="text"/>						
Petty cash required/Kleingeld benodig	<input checked="" type="checkbox"/>						
	R 20.00	R 10.00	R 5.00	R 2.00	R 1.00	R 0.50	<b>Total/Totaal</b>
	5	3	2	6	20	0	
<b>Total/Totaal</b>	R 100.00	R 30.00	R 10.00	R 12.00	R 20.00	R 0.00	R 172.00

- 7.1.1 Add a text field control in **7Cash\_Kontant** next to the '*Name of stall/Naam van stalletjie*' label. The field should be limited to 20 characters and display the text as uppercase. (3)
- 7.1.2 Add a check box field next to '*Petty cash required/Kleingeld benodig*'. Change the properties of the check box control so that the '*default value*' is set to checked. (2)
- 7.1.3 Open **7Calculate\_Bereken** and copy cells A1 to H3 and place it as a linked spreadsheet object into your form. (2)

DO NOT lock the form. DO NOT use a password.

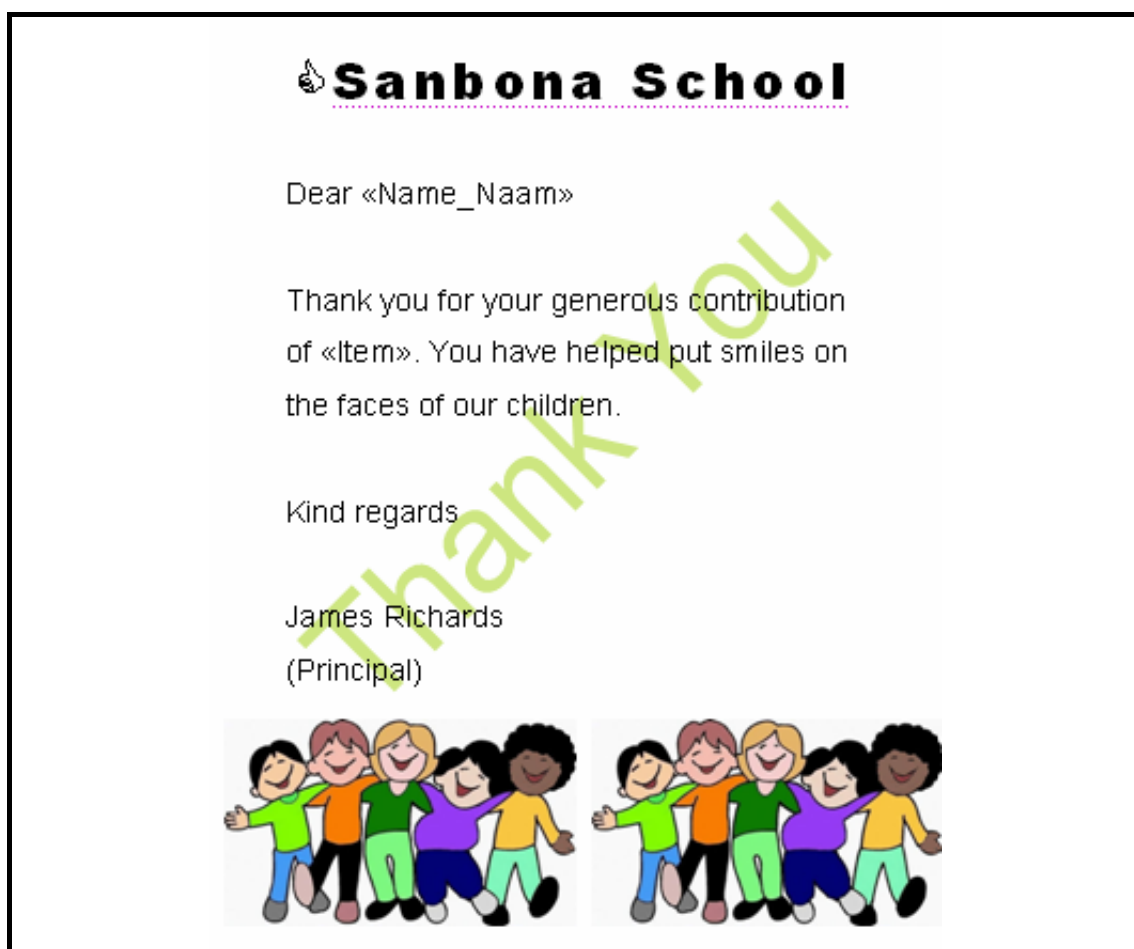
Save and close both files.



- 7.2 The principal wishes to send thank-you letters to all the people and businesses who donated items to the fun day.

Open the **7Thanks\_Dankie** document. This document will be used for a mail merge.

Study the example below showing the completed letter.



- 7.2.1 Change the size of the paper to 10.5 cm wide x 14.8 cm high or 4.13" wide x 5.83" high. (1)
- 7.2.2 Place a diagonal watermark on the page as follows: (1)
- Use the text 'Thank you'.
  - Use a green colour.
  - Do not set the watermark to 'semi-transparent'. (4)
- 7.2.3 Change the line spacing of the body of the document (excluding the school name) to 1.5. (1)
- 7.2.4 Insert the 'Thumbs-up' symbol 👍 (which can be found in the Wingdings character set) to the left of the school name, as shown in the example. (1)

7.2.5 Duplicate the image in the document as shown in the example above. Ensure that the images are grouped as one object. (2)

7.2.6 Use the mail merge feature to send merged letters only to the contact persons of the companies who donated items for the fun day.

The information about the donors is found in the **6FunDay\_PretDag** database in the **Sponsors\_Borge** table.

The letter must contain the name and surname of the donor/contact person and the item donated.

Merge the letter to a new document called **7Data**.

NOTE: You may use a query or the filtering function of the mail merge feature to select the recipients of the letter. (4)

Save and close all the documents. [20]

**TOTAL: 200**