basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL
SENIOR CERTIFICATE

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

NOVEMBER 2013

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.   Insert 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 examination number and centre 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, 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 your answer files saved onto the disk, OR you should make sure that ALL your answer files are saved on the network/computer as explained to you by the invigilator/educator. Make absolutely sure that all files can be read. Do NOT save unnecessary files/folders and do not hand in duplicate answer files/folders.

10.   The separate information sheet that has been provided with the question paper **MUST BE COMPLETED AFTER THE THREE-HOUR EXAMINATION SESSION** and then handed to the invigilator.

11.   During the examination you may use 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 questions involving spreadsheets. Absolute cell references must be used only where necessary to ensure that formulae are correct when they are copied to other cells in a spreadsheet.

14.   In all questions involving word processing, the language should be set to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise.

15.   Use centimetres as the unit of measurement when answering this question paper.

16.   **Alternative instructions for LibreOffice users are given in a dashed line border where the instructions differ from those for Microsoft Office users.**

17.   The examination folder/data disk that you receive with this question paper will contain a folder and the files listed below. Ensure that you have the folder and all the files before you begin this examination.

•	MyFolder_MyLeergids	Folder
•	1Aware_Bewus	Word processing file
•	2Bully_Boelie	Word processing file
•	2Logo_Logo	Image file
•	3Schools_Skole	Spreadsheet file
•	4Report_Aanmeld	Spreadsheet file
•	5Cyber_Kuber	Database file
•	6Data_Data	Word processing file
•	6Spreadsheet_Sigblad	Spreadsheet file
•	6Statistics_Statistiek	Word processing file
•	7Age_Ouderdom	Image file
•	7Count_Telling	Word processing file
•	Doc1_Dok1	Word processing file
•	Doc2_Dok2	Adobe Acrobat document

SCENARIO

Your school governing body decides to run a campaign to educate parents, teachers and learners about cyberbullying. The committee asks you to assist with the following:

* Creating a newsletter
* Creating a flyer
* Collecting and processing data

QUESTION 1

The school governing body decides to distribute flyers to make learners more aware of cyberbullying and the help that is available to them.

Open the document **1Aware_Bewus**.

1.1	Change the paper size to A5.	(1)
1.2	Change the page orientation to landscape.	(1)
1.3	Insert a 3 pt shadowed page border.	(3)
1.4	Format the wrapping style of the starburst/explosion shape so that the hidden word 'NOW' is still displayed within the starburst/explosion shape.	(1)
1.5	Format the four circles so that they appear as one object.	(1)
1.6	At the top right-hand side of the document and just below the starburst/explosion shape, insert a text box with a 2 pt dashed/fine dashed border. Move the given text 'Don't be part of the problem! Be part of the solution!' into this text box.	(4)
1.7	Change the font style of the text 'Treat others as ... when socialising online' to italics.	(1)
1.8	Correct the spelling error found in the first column of the table that starts/appears on the first page.	(1)
1.9	Decrease the indentation level of the bulleted list found in the second column of the table that starts/appears on the first page.	(1)

1.10   Change the table as follows:

- Add a third column to the table (on the right-hand side).

- Locate the text 'What do you do if your friend is being bullied online?' and move it to appear as a heading in the first row of the third column.

- Move the remaining text below the table to the <u>second row</u> of the <u>third column</u>.   (3)

1.11   Resize the table to fit across the whole page of the document.   (1)

1.12   Centre the headings in row 1 of the table vertically and horizontally.   (1)

1.13   Locate the web address in the footer.

Insert a hyperlink that links to the website together with a screen tip that reads 'Internet search'.

LibreOffice users:	Insert a hyperlink that links to the website, displaying the text 'Internet Search'.

(2)

Save and close the document **1Aware_Bewus**.   **[21]**

QUESTION 2

A newsletter giving hints and tips to parents, teachers and learners has been prepared but needs to be modified.

Open the document **2Bully_Boelie**.

2.1   Change the bottom page margin to 2 cm. (1)

2.2   Locate the main heading 'Cyberbullying' at the beginning of the document.

Change this text to WordArt/Fontwork with a textured fill. (2)

2.3   Find all occurrences of the words 'cyber bullying' and ensure that these two words appear as ONE word, in other words 'cyberbullying'.

Include all occurrences in both lower and upper case. (1)

2.4   Insert an automatically generated table of contents on page 1 below the main heading 'Cyberbullying'.

The table of contents must show the following:

- Only headings formatted with Heading 1 and Heading 2 styles
- Page numbers instead of hyperlinks and no tab leaders (5)

2.5   Locate the sentence 'She keeps on ....' to '... must I do?' at the bottom of page 1.

Apply a 1½ pt shadowed border and green shading (highlight) to this <u>paragraph</u>. (3)

2.6   Locate the text 'STAND UP AND SPEAK OUT' on page 2.

Place this text in a rounded rectangular callout shape similar to the one below:

NOTE:
- The shape must be exactly 2 cm high and 10 cm wide.
- The text must appear in Arial Black 16 pt. (6)

2.7   Insert a watermark using the image **2Logo_Logo** so that it appears from page 2 to the end of the document.   (3)

2.8   Locate and select all the text starting with 'Interpretation: Cyberbullying is ...' at the top of page 3 to '... to consider suicide' at the end of the document.

        2.8.1   Align the selected text to both the left and right margins.   (1)

        2.8.2   The selected text must appear in two equal columns with a space of 0.5 cm/14 pt between the columns.   (3)

2.9   Apply a dropped cap effect to the first letter of the word 'Interpretation' (found at the top of page 3), so that it appears over four lines and 0.5 cm/14 pt from the text.   (3)

2.10   Insert automatic page numbering in the footer to start on the second page of the document.

The first page of the document is not numbered. In other words, page numbering starts on the second page and is numbered from 1 onwards.   (4)

2.11   Locate the paragraph 'It can be ...' to '... pain of cyberbullying'.

Change the paragraph spacing of the paragraph to 0.35 cm/ 10 pt <u>before</u> and the line spacing to <u>exactly</u> 0.92 cm/26 pt.   (3)

2.12   Locate the heading 'How do I deal with it?' and add a bookmark called **Stats** to this text.   (1)

2.13   Locate the heading 'Cyberbullying Statistics' towards the end of the document.

Insert an endnote attached to this heading using the web address at the end of the document as the reference.

        NOTE: The web address must <u>only</u> appear in the endnote.   (4)

2.14   Locate the bulleted text starting with 'Over half of …' to '… cyberbullying occurs.' towards the end of the document.

Modify the existing bullets to the Webdings symbol ♥ with character code number 151 (Microsoft Office)/Webdings character code number U+F097(LibreOffice).   (1)

Save and close **2Bully_Boelie**.   **[41]**

QUESTION 3

The details of the schools and their bullying policies are stored in a spreadsheet called **3Schools_Skole**.

Open the **3Schools_Skole** spreadsheet.

3.1   Delete **Sheet1** as it is no longer required.   (1)

Work in the **Policy_Beleid** worksheet.

3.2   Format the worksheet as follows:

         3.2.1   Apply a red-coloured fill to the merged **cells A1:H1**.   (1)

         3.2.2   **Cells A2:G2** have been merged. Change this merged cell so that **cell H2** is also included in the merged cell.   (1)

         3.2.3   Change the font colour of the text in the merged **cells A2:H2** to white and left align the text.   (2)

         3.2.4   Place a double line outside border <u>around</u> **cells A1:H2**.   (3)

         3.2.5   Change the width of **column F** to 8 characters/61 pixels (Excel)/ 1.6 cm (Calc).   (1)

3.3   Insert a formula in **cell G4** to determine how long a policy has been in existence at Bona Secondary School.   (2)

3.4   As cyberbullying is a newer type of behaviour, it is not included in some policies.

         Add an IF-statement in **cell H4** to display an asterisk (*) if the policy includes cyberbullying (**column F**), otherwise the cell must remain blank or empty.   (3)

3.5   Hide **column I** and **column J** as the values displayed have been summarised in the table (**L1:M2**).   (1)
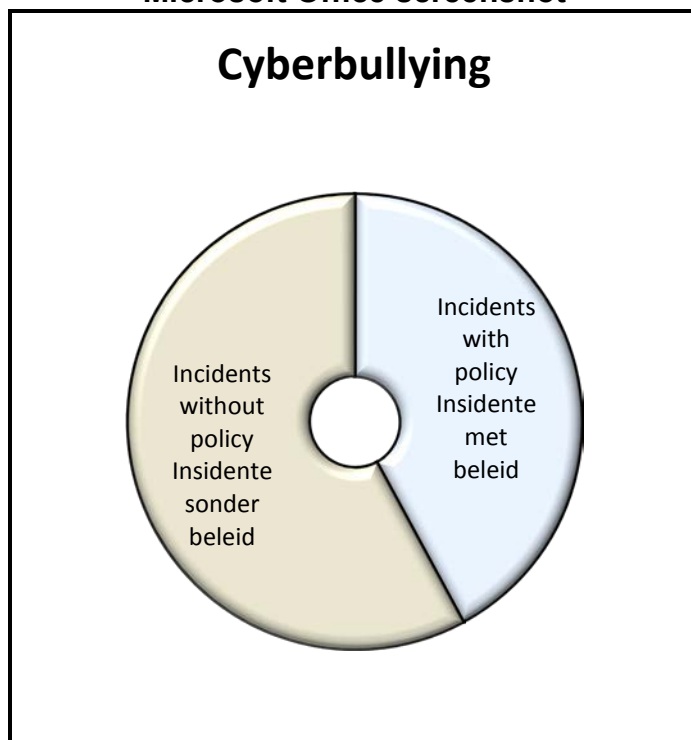
3.6   Insert a function in **cell M4** to determine the average number of years (**column G**) that schools have been implementing the policies.

         Round off the number to ONE decimal place.   (4)

3.7   Insert a function in **cell M6** to determine the number of schools that are listed in the spreadsheet.   (2)

3.8   Insert a function in **cell M8** to determine the number of schools that have policies against cyberbullying.   (3)

3.9   Create a doughnut chart/graph across **cells K15:N30** based on the data in **cells L1:M2** to resemble the example below.

Microsoft Office screenshot	LibreOffice screenshot
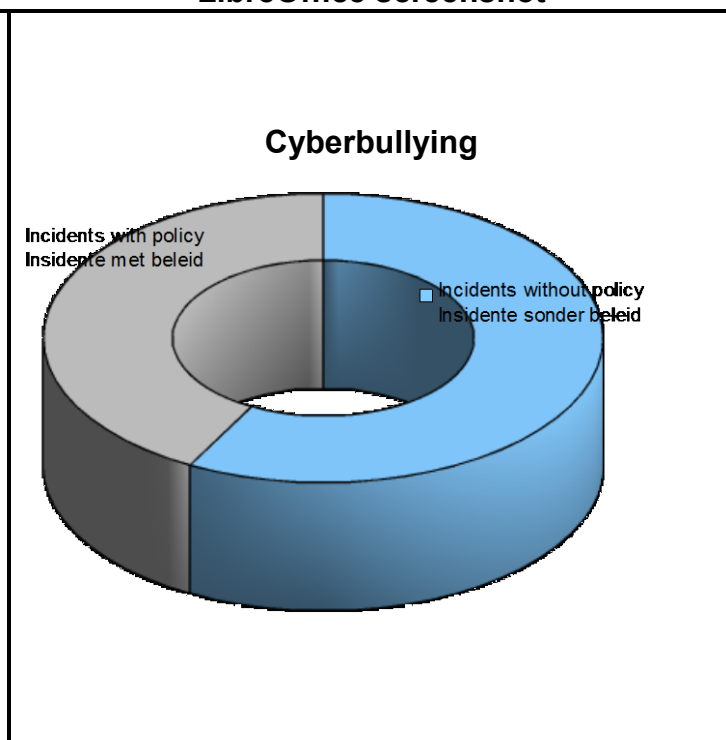
NOTE:

- The doughnut chart/graph has a 3-D bevel effect.
- The size of the doughnut's hole is approximately 20%.
- The heading 'Cyberbullying' appears above the chart/graph.
- All labels (legend) must appear in the segments of the chart/graph.

LibreOffice users:

- The doughnut chart/graph has a 3-D realistic format.
- The 3-D view appears with object borders.
- The heading 'Cyberbullying' appears above the chart/graph.
- All labels (legend) must appear in the segments of the chart/graph.

(6)

3.10   Work in the **Newest_Nuutste** worksheet.

In **cell K1**, enter the name of the school which has the newest policy <u>that includes cyberbullying</u>.

        HINT: Consider **columns F** and **G** before entering the name.

        NOTE: No formulas or functions are required in your answer.   (1)

Work in the **Codes_Kodes** worksheet.

Each school needs a code for the administration of the campaign.

3.11   Insert a function in **cell C4** to extract the first two letters of the school's name in **cell A4**.   (2)

3.12   Insert a function in **cell D4** to extract the third (3rd) and fourth (4th) letters of the province in **cell B4**.   (4)

3.13   The code for Bay Secondary School is displayed in **cell F5**.

Insert a formula in **cell G5** to combine the values in **cell C5 and D5** and the symbol in **cell E5**.

        NOTE: The newly created code must appear in upper case.   (3)

Save **3Schools_Skole**.   **[40]**

QUESTION 4

The campaign organisers asked some schools for statistics.

Work in the **Learners_Leerders** worksheet of the **4Report_Aanmeld** spreadsheet.

4.1   Change the tab colour of the **Learners_Leerders** worksheet to a colour of
        your choice, other than the default colour.   (1)

4.2   Some learners have reported bullying.

        Apply conditional formatting to **column G** so that all the cells showing
        learners that have reported bullying:

        • Appear in a light grey fill

        • Have a green border   (4)

4.3   The learners have been divided into three groups according to their age.

        Insert a nested IF statement in **cell E2** to determine the correct group for the
        learner whose surname appears in **cell A2**.

        NOTE:

        • Learners younger than 15 are in Group A.

        • Learners older than 17 are in Group C.

        • All other learners are in Group B.   (4)

4.4   Codes have been developed for each school and are stored in the
        Data_Data worksheet.

        Use a VLOOKUP function in **cell J2** in the **Learners_Leerders** worksheet to
        find the code matching the school displayed in **cell H2**. The lookup data
        appears in the **Data_Data** worksheet.   (3)

Continue working in the **Learners_Leerders** worksheet of the **4Report_Aanmeld**
spreadsheet.

4.5   **Cell M2** shows the number of learners who were bullied while **cell M3**
        shows the number of those learners who reported being bullied.

        • Add a formula in **cell M4** to calculate the percentage of learners who
          were bullied and who reported that they were being bullied.

        • Format **cell M4** to show only ONE decimal place in the answer.

        NOTE: Do NOT use the ROUND function.   (4)

4.6   A line chart/graph has been created to show the comparison between the actual number of incidents of bullying and the number of reported incidents of bullying.

Change the chart/graph appearing in the **Learners_Leerders** worksheet to resemble the example below.
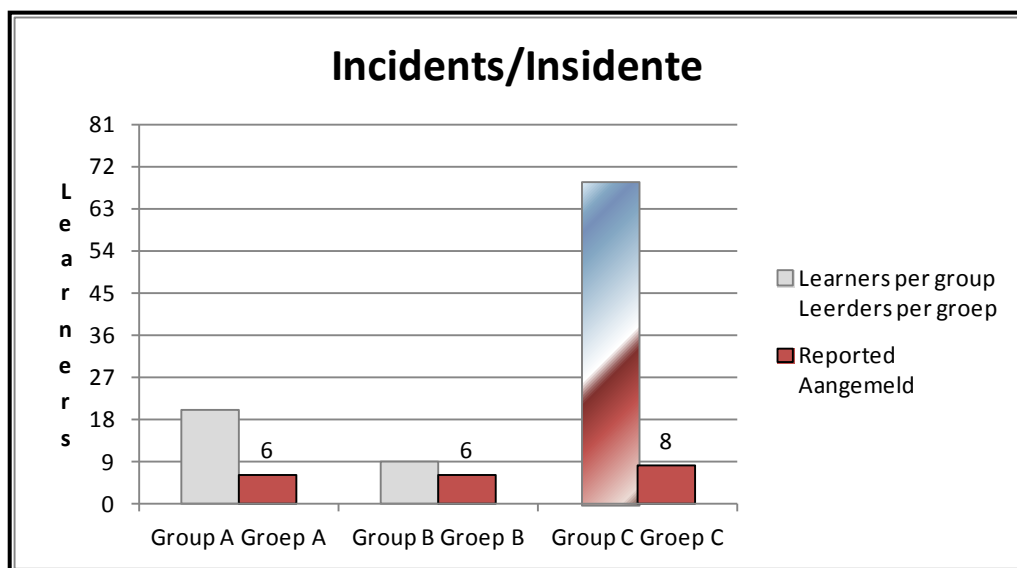
NOTE:

• Change the chart/graph type to a column chart.

• Only show the data labels above the 'Reported/Aangemeld' columns.

• Change the scale on the Y-axis to 9 units.

• Align the title of the Y-axis to read from top to bottom.

• Apply a gradient fill effect to the longest column.   (6)

Save and close the **4Report_Aanmeld** spreadsheet.   **[22]**

QUESTION 5

The details of learners who reported bullying have been saved in a database.

Open the **5Cyber_Kuber** database.

5.1   Work in the **51School_Skool** table and change the design of the table as follows:

5.1.1   Change the properties of the *Schoolnum_Skoolnom* field of the table to ensure that a value has to be entered in this field for every new record added to the table.   (1)

5.1.2   Insert a field called *Visit_Besoek* as follows:

- Place the field directly after the *Province_Provinsie* field.

- Set the data type to appear in a long date format, for example 25 November 2013.

> **LibreOffice users:**
> Show only ONE table, called **51School_Skool**, with all the correct fields.

(4)

5.1.3   Set a validation rule on the *NumLearners_GetalLeerders* field so that the minimum number of learners that can be entered is 250 and the maximum number is 2 500.

Add suitable validation text.

> **LibreOffice users:**
>
> - Work in the form called 51frmSchool_Skool.
>
> - Apply a data filter to the *NumLearners_GetalLeerders* field so that the minimum number of learners that can be entered is 250 and the maximum number is 2 500.
>
> - Add suitable help text.

(4)

5.1.4   Change the field size/field type of the *Ratio_Verhouding* field to 'Double', allowing only ONE decimal place.   (2)

Save and close the **51School_Skool** table.

The committee requires statistics on the nature of bullying with cellphones, SMSs or social media.

Open the **52Type_Tipe** table.

5.2   The *Reported_Aangemeld* field in the **52Type_Tipe** table is left empty (blank) when a learner reported bullying to someone other than his/her parents or teachers.

        Create a query called **Qry52** based on this table to display all the details of learners who reported being bullied to someone other than their parents or teachers.

        Save and close **Qry52**.   (2)

5.3   Open **Qry53**.

        Modify the query to display only the names, surnames and grades of female learners in Grades 11 and 12 who have been the victims of rumours.

        Save and close **Qry53**.   (4)

5.4   The committee needs to determine the number of rumours spread per grade.

        Open **Qry54**.

        Modify the query by adding a calculated field as follows:
        • Change the caption/alias of the calculated field to *Calc54*.
        • Display the number of rumours spread per grade.
        • Sort the query according to grade, from Grade 12 down to Grade 8.

        Save and close **Qry54**.   (5)

5.5   Open the form called **frmType_Tipe**.

        Modify the form as follows:
        • Change the background colour of the form to a red colour.
        • Centre the heading 'Statistics_Statistiek' of the form.
        • Change the border around the heading to a solid line.
        • Change the edit box for the *Gender_Geslag* field to a drop-down list. The values in this list should be 'M' and 'F'.
        • Move the image to the form footer.

        Save and close **frmType_Tipe**.   (6)

5.6   Create your own report called **MyReport** based on **Qry56** to display the data of the learners listed in the query.

- Display only the names and surnames of the learners according to grade.
- Show the heading 'Bullying' at the top of the report.

Save and close **MyReport**.   (5)

5.7   Open the report called **rptType_Tipe**.

Modify the report as follows:

- Remove the *StatsID_StatsID* field.
- Change the page orientation to landscape.
- Resize the heading 'Name_Naam' in the page header so that all the text is visible.
- Resize the *Name_Naam* field in the detail section so that all the text is visible.
- Calculate and display the number of learners in each group who reported that <u>rumours</u> were spread about them.
- Calculate and display the total number of learners who did NOT report <u>any form of cyberbullying</u>.
- Display your examination number in a label at the bottom of each page.

Save and close **rptType_Tipe**.   (12)

Save and close all documents.   **[45]**

QUESTION 6

Open the **6Data_Data** document.

6.1   Apply automatic numbering to all four items below the question.

        NOTE: Do NOT include the heading 'Biographical data'.   (1)

6.2   Add a text form field control next to the *Age_Ouderdom* field that will only
        allow digits (numbers) to be entered with a minimum value of 13.   (3)

6.3   Change the default option for the *Gender_Geslag* drop-down field control to
        read: 'Select one_Kies een'.   (2)

6.4   Align all the form fields, drop-down items and check boxes against a left tab
        setting of exactly 8 cm.   (2)

6.5   Change the vertical alignment so that the shape containing the text 'DATA
        COLLECTION SHEET' will always appear at the top of the page.   (1)

6.6   Add a field to show the current date and time at the end of the document.   (2)

        Save the document **6Data_Data**.

6.7   Continue working in the **6Data_Data** document to prepare a mail merge for
        return slips.

        • Use the **52Type_Tipe** table of the **5Cyber_Kuber** database as the data
          source.

        • Select only Grade 10 male learners who reported cyberbullying to their
          parents.

        • Add the merge fields *Name_Naam* and *Surname_Van* in the space
          provided in the table.

        • Right align the merged fields *Name_Naam* and *Surname_Van* and
          ensure that there is a space between the two fields.

        • Save the document as **6Ready_Gereed**.

        • Complete the merge and save the new merged document as
          6Merge_Saamvoeg.

        Save and close the document **6Data_Data**.   (7)

6.8   Open the **6Statistics_Statistiek** document and the **6Spreadsheet_Sigblad** spreadsheet.

   6.8.1   Split the table so that **Bullying Statistics** and **Cyberbullying Statistics** appear in two separate tables, one below the other, each with its own heading.   (1)

   6.8.2   Copy the **Bullying Statistics** table from the **6Statistics_Statistiek** word processing document.

              Paste the table into the **6Spreadsheet_Sigblad** spreadsheet so that any future changes to the data in the word processing document will automatically update in the spreadsheet.

              Save the **6Spreadsheet_Sigblad** spreadsheet and <u>keep it open</u>.   (2)

   Work in the **6Statistics_Statistiek** word processing document.

   6.8.3   Change the font colour of all the data that is not given as a percentage (%) in the data column in the **6Statistics_Statistiek** document to a red colour.   (1)

   6.8.4   Use the **Bullying Statistics** table to create a new table at the end of the **6Statistics_Statistiek** document.
              • Show only the primary schools' statistics in the new table.
                (You may use any method of your choice to arrive at the answer.)
              • Ensure that this new table contains the heading 'Primary Schools'.
              • Paste this new table into **Sheet2** of the **6Spreadsheet_Sigblad** document as an embedded object.   (3)

Save and close all documents.   **[25]**

QUESTION 7

The committee needs some help to manage their documents.

7.1   Rename the folder called **MyFolder_MyLeergids** to **Exam_Eksamen**.   (1)

7.2   Add your examination number to the author properties of the TIFF image file.   (1)

Open the document called **7Count_Telling**.

7.3   Type in the name and <u>size on disk</u> of the PDF file in your examination folder,
        in the space provided in the **7Count_Telling** document.   (2)

7.4   Use the **7Count_Telling** document to complete the next two questions.

        7.4.1   Highlight the word 'bully' in all forms in the **7Count_Telling**
                  document in a colour of your choice.   (1)

        7.4.2   Enter the number of times all word forms of the word 'bully' appear
                  in the document called **7Count_Telling**, in the space provided.   (1)

Save and close the **7Count_Telling** document.   **[6]**

                                                    TOTAL: 200