

MATHSDAY – ScoreKeeper System Documentation

1.0 About The ScoreKeeper System

ScoreKeeper is the computer system used to record and report school's scores for the annual Maths Day for Year 12 students around the ACT and New South Wales which is held every year at the Australian National University, on the last Friday in May.

The *ScoreKeeper* system is written in *Visual Basic* (V6) and uses a *Microsoft Access* database to store and retrieve data (competition scores).

There are 2 main parts to the *Scorekeeper*:

- The **Scorekeeper SYSTEM**. The executable (*Scorekeeper.exe*) is usually found under *C:\Program Files\Scorekeeper*

Other vital system files are (info only, no need to directly manipulate):

- *Master.md\$* This is the *ScoreKeeper Master File* of all schools that have ever competed in a Maths Day competition. This is updated via the *ScoreKeeper* system after the completion of Maths Day and stores the latest *ZScore* (handicap) for future competitions. There is no need to update this file directly.
- *Empty.md\$* This file contains all the statistical formulae for calculating *ZScores* etc. There is no need to access/update this file.
- *ASRMaster.doc* This is the master document for the *All Scholls Report*, a *Microsoft Word* document for merging scores and printing of individual reports for each school at the end of the day. There is no need to update this file as all values are merged into the document by the system.
- *ScoreKeeper.cfg* This holds all the configuration information in *Scorekeeper* like the path for *Word* and settings for restricting the display of ranks in reports. The configuration settings should be updated within the *Scorekeeper* system.
- The **ScoreKeeper DATA** The scores for competing Teams. The data is stored in a *Microsoft Access mdb* file, usually *MDyyyy.mdb* under the *C:\Program Files\Scorekeeper\Mathsday\yyyy* folder.

2.0 Running ScoreKeeper

There are 3 main stages in running ScoreKeeper:

- 2.1 Setup
- 2.2 Entering Scores
- 2.3 Running Reports

2.1 Setup

This is where:

- the *Master Data Base* file is updated with a *New ZScore* (handicap value) after a Maths Day is completed in preparation for the following year's event.
- the participating teams are entered or initialised into the ScoreKeeper database for the current year
- *predefined* scores (max values) are defined for editing scores when entered into ScoreKeeper
- Swiss *sites* are defined for the Swiss contest.
- Options are set for the ScoreKeeper system

2.1.1 Updating the *Master DB*

This process should be carried out sometime before the teams are entered for the current Maths Day. The process adds any new teams that participated in the previous Maths Day to the *Master Database* and for those and existing teams stores the *New ZScore* (handicap derived by the team's performance overall on the previous Maths Day) which then becomes the starting *ZScore* for the team in the current year.

Open the latest Maths Day file (*DB*) and run the *ZScores* report (*Reports\Z-Scores List*). Once this is done you will be able to use *File\Update Master DB* to update the *Master DB* file with the details explained above.

Update the *ScoreKeeper System ReadME.txt* file to indicate that the *Master DB* has been updated. This is handy for future reference.

2.1.2 Initialising Participating Teams – *Setup/Teams*

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Once a list of teams is prepared (Usually days before the event), teams can be initialised into a database for the current Maths Day.

- If a database for the current Maths Day hasn't been created already, initialise a new database with File\New to create a new database for the current Maths Day. You will then be taken directly to the *Setup Teams* screen.

Otherwise use File\Open to open an existing database and select *Setup\Teams* from the main menu

Note: It's probably better to *Exit* out of the *Setup Teams* menu when you use File/New as the allocation of Team Codes is automatic and in alpha order and you will have a little more control if you *Exit* first and resume via the *Setup\Teams* path.

- The *Setup Teams* screen is split into 2 with the full list of all teams that have ever competed in Maths Day on the left. Simply select a team by *double clicking* on the left screen which will place it in the right under the current Maths Day.

If a team isn't displayed on the left, it must be a new team so select the *New* button and provide the *Team Name*, *Team Code*, whether it is *City* or *Country* and a *Z** Score which is a handicap usually derived from the previous Maths Day the team competed in but given this team is new it should be an educated guess. If unsure just enter 0.0.

Make sure the teams are registered if they are serious competitors. If just a makeup team for the day Unregister them (*Modify* and untick the *Register* field) so they can't contribute to statistical calculations and prizes.

- You can also *Modify* and *Delete* teams from the current Maths Day using this interface.

2.1.2 Initialising Participating Teams – *Setup/Team Details* (cont)

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Team Details -2010 (MD2010.MDB)

Option Help

School Pick List

- Abbotsleigh
- Batemans Bay High School
- Bega Valley Christian College
- Bomaderry High School
- Bowral High School
- Braidwood Central
- Canberra College Weston
- Canberra College Woden
- Canberra Girls Grammar
- Canberra Grammar
- Chevalier College
- Chevalier-Braidwood
- Cootamundra High School
- Copland College
- Copland College Too
- Crookwell High School
- Daramalan College
- Daramalan College 1
- Daramalan College 2
- Dickson College
- Eden High School
- Erindale College
- Hawker College
- Hawker College 1
- Hawker College 2
- Hawker College Blue
- Hawker College Green
- Hawker Daramalan Colleges
- Karabar High School
- Lake Ginninderra College
- Lake Tuggeranong College
- Leeton High School
- MacKillop Catholic College
- Marist College
- Melba Copland Secondary Sch

Current Year School Teams

10:24:47 PM 21/03/2010

No	Code	School Name	Location	Base Z	Register
01	A1	Bega High School	Country	-0.11	Yes
02	A2	Bombala High School	Country	-1.37	Yes
03	A3	Burgmann Anglican School	City	-0.30	Yes

Add Team

Team Code: A4

Team Name: Canberra Girls Grammar

History Z-Score: 0.08

Location: City

Register: ☒

OK Cancel

Update: New Remove Modify Sort

Screen: Cancel OK

Select School for Current Year School Team List

2.1.3 Setting Predefined (Maximum) Scores – Setup/Predefined Scores

Use this menu option to define the maximum possible score for each contest question. The *predefined score* is used for checking purposes when scores are entered. Only use this option if there is a change to any question's maximum score.

Simply choose the Contest and the Question, update the maximum Score Value and Save. Close when done.

Predefined Scores for Group Contest

Option Help

Contest

- ☐ Group
- ☐ Swiss
- ☐ Poster
- ☐ Cross
- ☐ Relay

Predefine Scores

Question No	Score
01	15
02	15
03	20
04	20
05	25
06	25
07	30
08	30
09	35
10	35

Data Entry Area

Question No. 1

Score 15

Update

Undo Contest

Save

Screen

Close

2.1.4 Defining Swiss Contest Sites – *Setup/Swiss Sites*

Select Sites

Swiss Contest Sites

Select Teamcode to remove from Sites

A2	A4	A6	A8
B2	B4	B6	B8
C2	C4	C6	C8
D2	D4	D6	D8

Teams

Select Teamcode to add to Sites

A1	A3	A5	A7
B1	B3	B5	B7
C1	C3	C5	C7
D1	D3	D5	D7

Save Exit

This menu option must be run to define the Swiss Contest Sites for the Swiss Contest. Teams are paired in the Swiss Contest and told to meet at a designated *site* so this step is vital to the successful running of the Swiss Contest. Ideally every second TeamCode is used as a site with an even split amongst the A's, B's, 's and D's.

The top section of the screen displays a default for the Sites and unfortunately something must be done to force a Save so even if the default appears correct, click on any Site in the top section and return it by selecting it in the bottom section and hit Save (design fault sorry – no time to change now).

Alternatively, there may be a real change to make so apply that change by either clicking in the top section to remove *Site/s* or the bottom section to add *Site/s*. Sorry about the confusion.

2.1.5 Defining ScoreKeeper Options – *Setup/ScoreKeeper Options*

This menu option is used to define:

- *Path* - The System Path for Word. This is vital as *Word* is used to print the individual School's Reports at the end of the day and the *Path* for *Word* varies between Computer Systems depending on the version of *Office/Word*.
- *Report Defaults* - Used to define the depth of displayed rankings in reports handed to schools. This is done to protect the lower scoring teams from being compared and rated. The restrictions tend to remain static (they haven't changed for years) but the option is here to change them. They can also be changed when running reports.

2.2 Entering Scores

There are 5 Contests held throughout the day:

- Group Contest (2 stages: Q1-Q8 & Q9-Q10) (2.2.2)
- Swiss Contest (5 Rounds) (2.2.3)
- Poster Contest (2.2.5)
- Cross Contest (2.2.6)
- Relay Contest (4 Stages – Q1-Q5, Q6-Q10, Q11-Q15, Q16-Q20) (2.2.7)

The entry of Scores for all contests is done in *ScoreKeeper* using the main menu item *Contests* and selecting the appropriate Contest.

2.2.1 Some Key Features of all Contest Data Entry Screens:

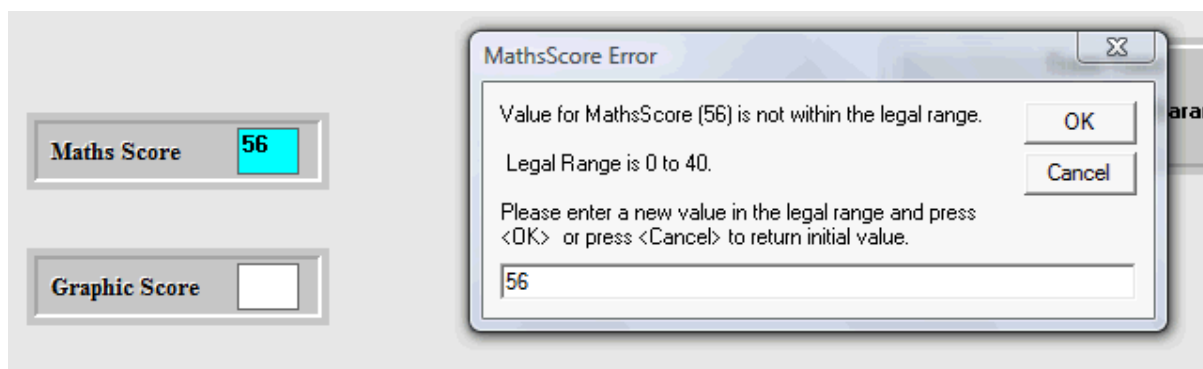
2.2.1.1 Unlocking Scores (F9)

It is important that scores are entered accurately when the data entry people can sometimes be under pressure so a key design features is to lock scores once entered.

To change a score, click on the field and Press **F9** (which will allow you to alter the selected score. In order to delete all data for the team on the page, press *Ctrl + D* (*Edit/Delete Scores For This Team*).

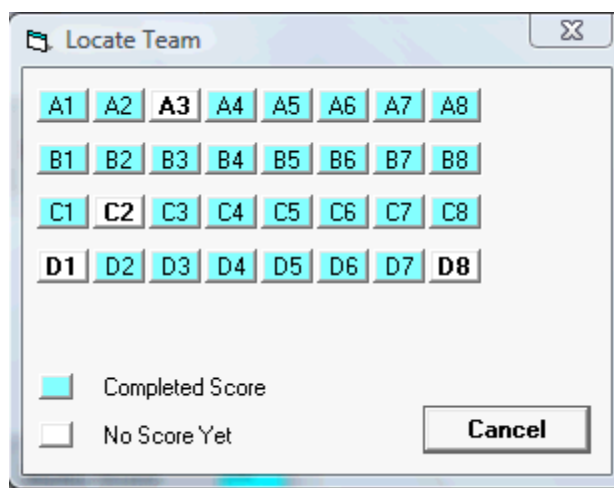
2.2.1.2 Error Checking while Entering Scores

As scores are entered, an automatic check is made against a specified maximum (see *Setup/Predefined Scores*). Checks are also made to ensure that Scores add up. When an entered score is invalid, a pop up box will appear with the incorrect value highlighted, so simply type in the correct value and hit *OK*.



2.2.1.3 Navigating Between Teams (*Double Click* almost anywhere and *Select*)

The easiest way to bring up the contest screen for a Team is to Double Click anywhere on the background colour within the form which brings up a panel of all participating Teams and *clicking* on the appropriate Team. Alternatively select *Select Teams* from the *Main Menu* to bring up the panel of Teams.



Note the cyan colour to represents a team that has already been entered and the white to indicate that a score hasn't been entered yet. This is handy to track down slack supervisors that haven't handed in their sheet and, this does happen.

There are many other ways to Navigate between teams by using the arrows on the screen, *Page Up/Down* keys, *Shift & Page Up/ Down* keys & *Ctrl & Page Up/Down* keys but by far the easiest way is to use the *double click* method above.

2.2.1.4 Stamp Entered Score Sheets

Once a score sheet has been entered into the system, stamp it so it doesn't cause confusion and, if manual scorers are present, hand it to them, else file away somewhere

2.2.1.5 Determining Missing Teams

Apart from using the panel of Teams mentioned in 2.2.1.3 above to determine missing teams, you can use the *Reports* from the contest's *Main Menu* to produce a report of *Completed Scores* or *Missing Teams*. These reports also contain the relevant

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contest's scores and the reports can be printed. Use whatever method you feel most comfortable with.

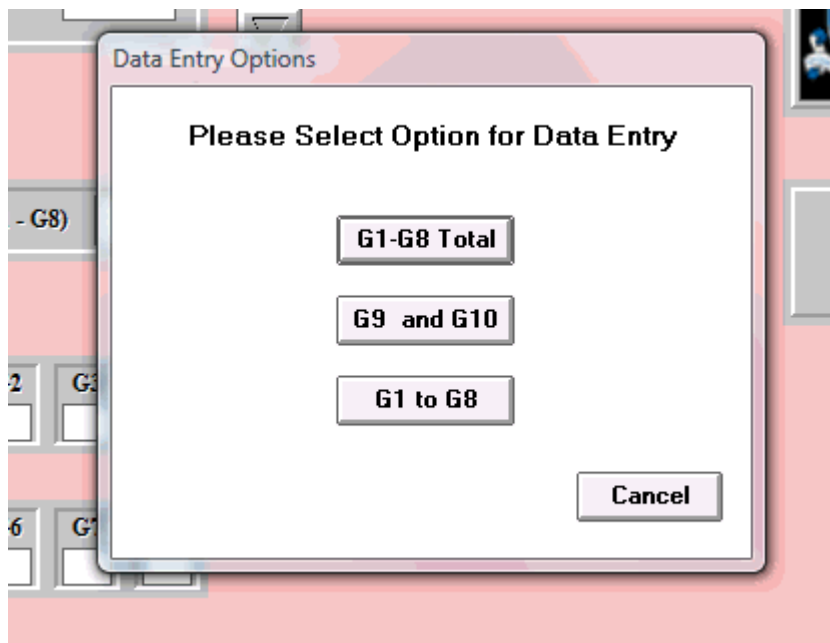
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2.2.2 Entering Group Contest Scores (*Contests/Group*)

Group Contest Scores are entered in 2 stages:

- (1) Q1 – Q8 Immediately scores are available. Entry of this is vital as the scores are used to determine *Head to Head* pairings for the first 2 rounds of the *Swiss* contest.
- (2) Q9 & Q10 The scores for Question 9 and Question 10 of the Group Contest can be entered when it is convenient, usually during the lunch break.

When you first enter the *Group Contest* menu you are asked which option you want for data entry. This is called the data entry **Focus** and can be changed at any time by selecting **File/Switch Focus** or pressing **F8**.



Choose **G1-G8 Total** if time does not allow you to enter the individual scores for Q1 through to Q8. Remember, the data needs to be entered quickly before the commencement of the *Swiss* Contest. Note that under this option, only the field *Total (G1 – G8)* is available for data entry. The other fields are locked.

Choose **G9 and G10** when you come to enter scores for *Group* Contest questions 9 and 10. This can be done when appropriate usually in the lunch break. Note that only the fields *G9 and G10* are

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available for data entry. The other fields are locked.

Choose **G1 to G8**

if time allows you to enter the individual scores for Q1 through to Q8. There has always been enough time to do this in the past but remember that this data needs to be entered in time for the commencement of the Swiss Contest.

Note that only the fields *G1 – G8* are available for data entry. The other fields are locked

Once the appropriate Data Entry Option is selected:

- Bring up the appropriate screen for a Team (using the *double click* method) and enter the scores from the Supervisor's markings. The only thing to be aware of is that supervisors sometimes just tick an answer rather than write a value so you may have to use the maximum value in the *Mark* column as the value to be entered.
- Use the *Enter* key after entering a score to go to the next field. After the last field, focus will end on the *Save* key. You can also *Tab* or mouse click between fields.
- Hit *Save* to complete score entry for the school.

Note that after the *Save* key is hit, the program automatically brings up the next team so if scoresheets can be sorted in order of Team Code first this may be useful but it really isn't necessary with the simple and easy *double click* Team selection method.

- Stamp the entered scoresheet and put aside
- Use the Teamcode panel (*double click*) or run the *Missing Teams* report to chase up missing score sheets until all Teams scores are entered

IMPORTANT: **Once the Group Contest G1 to G8 Scores have been entered, the Head to Head placings for the Swiss contest should be derived and reports run for the first two rounds of the Swiss Contest.**

This is done by opening the *Swiss Contest* (*Contests/ Swiss Contest*) and selecting *Report/Head To Head* and using *Options/ Print* to print and *Options/Save* to save. Do this twice and you should have *Head to Head* teams listed for the first 2 rounds. Take the lists to the announcement desk.

2.2.3 Entering Swiss Contest Scores (*Contests/Swiss*)

There are 5 rounds in the Swiss Contest. Teams are paired in each round according to their overall score ranking with the top 2 teams playing each other, followed by the next 2 and so on. However, another factor in the equation is that teams should not have played each other in a previous round which means that the next best fit is found.

The process of pairing teams is complicated and is automatically programmed in the Scorekeeper using the *Report/Head To Head* option.

Important:

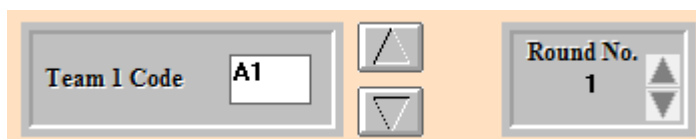
- **Ensure the Sites have been set up using *Setup/Swiss Sites*** so that sites are numbered A2, A4, A6 etc...
- **As soon as the *Group Contest* scores for Q1 – Q8 have been entered, run the *Swiss Contest Report/Head to Head* twice** to set up the pairings for the first 2 rounds of the Swiss Contest.

Remember to:

- **Print** the *Head To Head* report and
- **Save** the Head to Head Teams
(*Options/Close* and *Yes to Save*) each one.
- **Deliver the printed *Head To Head* reports** for the first 2 rounds to announcement desk

Once ready to enter *Swiss Contest* scores (and this contest is a little tricky):

- Select the appropriate *Round* by clicking the *Round Number Up* ▲ or *Down* ▼ Arrows



The screenshot shows a software interface with two main input areas. On the left, there is a label 'Team 1 Code' followed by a text box containing 'A1'. To the right of this text box are two small square buttons with upward and downward pointing triangles. On the right side of the interface, there is a label 'Round No.' followed by a text box containing the number '1'. To the right of this text box are two small square buttons with upward and downward pointing triangles.

Note: If the opposing Team is not displayed after running and saving the *Head to Head* Report, cancel out of the *Swiss Contest* screen and come back in again. This usually happens the first time the *Head to Head* report is run. After that teams will be automatically loaded as you should always

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be 2 *Head to Head* reports ahead.

- Bring up the appropriate screen for a Team (using the *double click* method) and check that the Opposing Team is loaded and is as per the Supervisor's Score sheet from which you are entering data.

The screenshot displays a software interface for entering team scores. It features a light orange background with several grey-bordered input fields and buttons. At the top left, there is a 'Team 1 Code' field containing 'A1' and a button with a diagonal line. To its right is a 'Round No.' field containing '1' and a button with up and down arrows. Below these, there is a 'Team 1 Total' field. Further down, there is a 'Team 2 Code' field containing 'A8' and a button with a diagonal line. At the bottom, there is a 'Team 2 Total' field.

- Enter the *Team Total* (2nd last column) for each Team. Be careful to enter against the appropriate Teams.

Use the *Enter* key after entering a score to go to the next field. After the last field, focus will end on the *Save* key. You can also *Tab* or mouse click between fields.

- Check that the Scorekeeper system has calculated the appropriate *Victory Points* and *Save*.

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The screenshot displays the MATHSDAY ScoreKeeper System interface. It features several input fields and buttons for managing team scores. Team 1 information includes a code of 'A1', a total score of '60', and victory points of '60'. Team 2 information includes a code of 'A8' and victory points of '0'. The interface also shows the round number as '1' and the team names: 'Bega High School' for Team 1 and 'Hawker College Blue' for Team 2.

Team 1 Code	Team 1 Total	Team 1 Victory Points	Team 1 Name
A1	60	60	Bega High School

Team 2 Code	Team 2 Name	Team 2 VPs
A8	Hawker College Blue	0

- Stamp the entered scoresheet and put aside
- Use the Teamcode panel (*double click*) or run the *Missing Teams* report to chase up missing score sheets.
- **Run the next Head To Head Report** (*Report/Head To Head*).

Use *Options/Print* to Print and *Options/Save* to Save.

Note: As the *Head To Head* reports are 2 rounds ahead, this is only necessary after entering scores for Rounds 1-3.

That is, the last Head To Head Report should be for Round 5. Therefore, there should be no need to run a *Head To Head Report* after rounds 4 and 5.

- Take the latest *Head To Head* Report to the announcement desk.
- Do the above till Round 5 is complete or as many rounds (up to a maximum of 5) that time allows.

2.2.4 During the Lunch Break

Once all scores are entered for the 5 rounds of the Swiss Contest, you can take lunch but in that time you should also

- Enter Group Contest Scores for Questions 9 and 10 and check that Group Contest Totals are correct
- Enter individual scores for Group Contest Q1 – Q8 if you didn't do it earlier and confirm that Totals match
- Enter Poster scores (need to obtain sheets from volunteer scorers)
- Check ScoreKeeper data against Supervisor's progressive scores so you can be confident that data is entered into *ScoreKeeper* correctly.

Produce a listing of *All Schools Progress Report By Team Code* (using the *Main Menu Reports* option) and compare with manual scorers if they exist or Supervisor's progressive score sheets if you can get hold of them. Be warned though, Supervisor's progressive score sheets can be incomplete or just plain wrong.

If not, just check that scores look reasonable. You can also do an *All Schools Progress Report by Score* to see if rankings look reasonable.

These are useful ways to ensure that data has been entered into ScoreKeeper accurately to date and you can relax over lunch in preparation for the afternoon.

2.2.5 Entering Poster Contest Scores (*Contests/Poster*)

- The entering of Poster Contest scores should be done during the lunch hour. The hardest part about this process is obtaining the score sheets from the volunteers that assign the points. It's well worth the time to go out and see what the students have produced for the Poster Contest by the way as they are truly brilliant.
- Bring up the appropriate screen for a Team (using the *double click* method) and enter the scores from the volunteer's markings.
 - Use the *Enter* key after entering a score to go to the next field. After the last field, focus will end on the *Save* key. You can also Tab or mouse click between fields.
 - Hit *Save* to complete score entry for the school.

Note that after the *Save* key is hit, the program automatically brings up the next team so if scoresheets can be sorted in order of Team Code this may be useful but it really isn't necessary with the simple and easy double click Team selection method.

- Not all teams will have participated in the Poster Contest but use the Teamcode panel (*double click*) or run the *Missing Teams* report to double check that all teams on the volunteer's sheets have been entered

- **Note the Poster Contest Winners**

Once all Poster scores have been entered, write down the winners of the following prizes and keep for award presentation later:

- **Best Graphics** (Highest *Graphics* Score)
- **Best Mathematical Solution** (Highest *Maths* Score)
- **Best Overall** (Highest *Score for Contest*)

An effort is made to ensure that 3 different teams win the above prizes so often results will be tweaked slightly to ensure this is the case.

Determine the appropriate highest scores by scanning down the list of scores provided from the volunteers sheets or run a *Completed Scores* report (Poster Contest data entry screen, *Report/Completed Scores*) and scan down the appropriate columns to determine the highest scores.

To verify Trophy Winners (optional)

You can even run a report from the Main Screen, *Reports/Executive Results Summary* but you should only do this to verify your winners obtained manually. The report hasn't actually been used in years and the surrounding text will be out of date and irrelevant to this exercise.

The Trophy winners listed won't be accurate at this time of the day either as the contests for the afternoon haven't been run.

However, the Poster winners, if all Poster scores have been entered, will be a guide to confirm that the winning teams, determined in your manual scan, are correct.

2.2.6 Entering Cross Contest Scores (*Contests/Cross*)

- The entering of Cross Contest scores are done once the Cross contest is complete. Relax, you will have plenty of time.

The scores you enter are the four Totals to the right of the Supervisor's score sheet. Again, the only thing to be aware of is the fact that Supervisor's should just count the ticks to derive each of the four totals that need to be entered.

The Scorekeeper system then multiplies the sum of the totals by four to derive the final contest score for the team but sometimes the Supervisor's will put a multiplication by four in the four totals. The system will pick this up however as a score that is too large. Just count the ticks again in this instance or if obvious, divide by four when entering the totals. Sorry, I know it's as clear as mud but unfortunately it will bite you if not careful.

- Bring up the appropriate screen for a Team (using the *double click* method) and enter the scores from the Supervisor's markings.
 - Use the *Enter* key after entering a score to go to the next field. After the last field, focus will end on the *Save* key. You can also Tab or mouse click between fields.
 - Hit *Save* to complete score entry for the school.

Note that after the *Save* key is hit, the program automatically brings up the next team so if scoresheets can be sorted in order of

Team Code this may be useful but it really isn't necessary with the simple and easy double click Team selection method.

- Stamp the entered scoresheet and put aside
- Use the Teamcode panel (*double click*) or run the *Missing Teams* report to double check that all teams have been entered

2.2.7 Entering Relay Contest Scores (*Contests/Relay*)

- This is a fun contest but towards the end things can get frantic, so relax and let others collect score sheets. There are up to four sheets that will come in for every team but it is rare for a team to finish all four sheets and the number of sheets that a team completes will vary from team to team.

Therefore it is hard to determine if Team's haven't handed in sheets, it's just up to the collectors to make sure all sheets completed by supervisors are collected. Collectors should also ensure that each sheet has a Team Code on it as Team Codes have been left off in the past and it is very hard to backtrack and find from where it came.

- A data entry option screen will come up when first selecting the contest screen (similar to the *Group Contest*) and you can choose between entering *Totals* or individual scores. Try entering individual scores which is normally not too stressful but if time doesn't allow, choose *Totals Only*.
- Bring up the appropriate screen for a Team (using the *double click* method) and enter the scores from the Supervisor's markings but be careful that you are entering the right row.
 - Use the *Enter* key after entering a score to go to the next field. You can also Tab or mouse click between fields.
 - Hit *Save* to complete score entry for the school.
 - Stamp the entered scoresheet and put aside
 - Once all sheets are entered you are ready to run reports whilst students and supervisors leave for speeches and presentation.

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Now the pressure is on and there will be questions coming from everywhere. Remain calm, you can only do the best you can and **remember at all times, the staff and pupils are only here to have fun!!**

2.3 ScoreKeeper Reports

ScoreKeeper reports can be run throughout the day to check that data has been entered accurately and even to see how things are progressing. There are a few options that are vital to the end of day processing as they are used to determine trophy winners and for handout to schools before they leave.

The reports are outlined below. See *Summary of Actions* for the reports that have to be produced at the end of the day as well.

2.3.1 Check Team's Grand Totals (Optional)

This can be run at the end of the day before final reports are run. The utility is simply a quick check by the *ScoreKeeper* system to ensure that individual scores for each team add up to the Team's Grand Total. It was written in the early days when the confidence in the systems stability was not so high but it has never been known to detect a problem in the many years the system has been run for Maths Day.

2.3.2 Z-Scores List (Optional – Not For Publication)

This is a list by Team Code of all teams *Z Scores*. Teams start with a *Z Score* (handicap) based on performance in the previous year so that teams are evenly matched. The report is also used to calculate *ZScores* for the current day and new *ZScores* for the following year.

As well as presenting awards to the 1st, 2nd and 3rd teams overall, there is a *shield* (based on *ZScore*) presented to the best *City* and the best *Country* team.

It shouldn't be necessary (as the system calculates and stores *ZScores* on the fly) but it's probably worth running the *Z-Scores List* immediately prior to running the main reports at the end of the day to ensure fully that *ZScores* are updated.

The main use for printing this list is to produce a list of competing teams at the start of the day and check that their *Base Z score* is as per their *New Z Score* from the previous year.

2.3.3 All Schools Progress Report by Score (Optional – Not For Publication)

This is a list ranked by Total Score and can be run throughout the day to check on progress.

2.3.4 All Schools Progress Report by TeamCode (Optional – Not For Publication)

This is a list by TeamCode and can be run throughout the day to check on progress but particularly during the lunch hour to check against Supervisor's markings (they also maintain running totals) and manual scorer's if they exist.

2.3.5 City Schools Progress Report (Optional – Not For Publication)

This is a list of *City* schools ranked by Total Score and can be run throughout the day to check on progress.

2.3.6 Country Schools Progress Report (Optional – Not For Publication)

This is a list of *Country* schools ranked by Total Score and can be run throughout the day to check on progress.

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2.3.7 Overall Results (End Of Day – Definitely Not For Publication)

This list contains 3 reports and is used to determine winners of the various awards:

- All schools ranked by *Total* Score. Used to determine the 1st place trophy winner and 2nd and 3rd prize certificates.
- *City* Schools ranked by Z Score (handicap shield). Used to determine the *City* trophy winner.
- *Country* schools ranked by Z Score (handicap shield). Used to determine the *Country* trophy winner.

As this contains all scores for all teams the report is strictly confidential.

Example of Overall Results Report (Confidential - For your eyes only)

ANU MATHS DAY - 2009

Overall Results		
TROPHY		
SCHOOL		
1	Narrabundah College 1	789
2	Marist College Canberra 1	783
3	Burgmann Anglican School	777
4	Canberra Grammar School	771

CITY AND COUNTRY SHIELDS		
SCHOOL		
CITY		
1	Burgmann Anglican School	1.7408
2	Daramalan College	0.7987
3	Lake Tuggeranong College	0.7348

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2.3.8 Top Schools Overall (End Of Day – A Copy to All Schools)

Like the Overall Results above, this list contains 3 reports but restricts the teams listed to a specified number in the *Trophy* (Total Score) competition and *City* and *Country* (handicap) shields.

The listing of scores is also restricted to a specified number of teams. In the example below, Total Scores are shown for the top 3 teams and *Z Score* handicap values aren't displayed at all. These restrictions can be altered when you run the report but it hasn't changed in the many years the system has been used and you should not change these values without careful consideration.

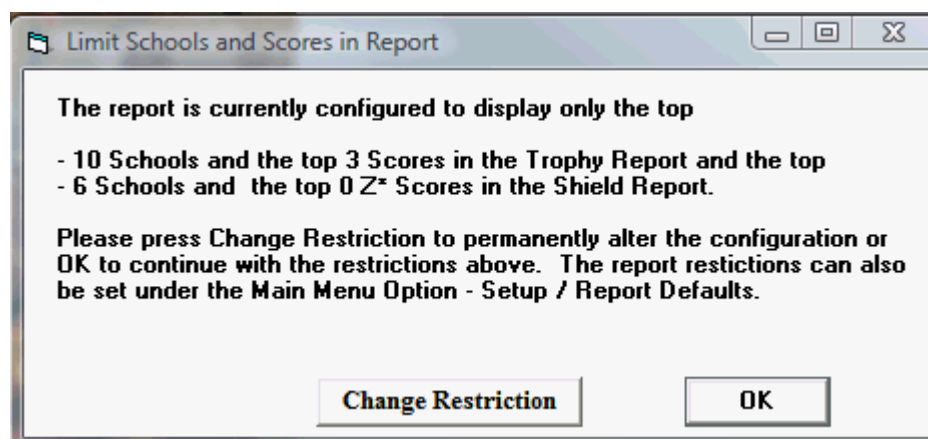
Example of Top Schools Overall Report (1 copy to each school)

ANU MATHS DAY - 2009

Top School Overall		
TROPHY		
SCHOOL		
1	Narrabundah College 1	789
2	Marist College Canberra 1	783
3	Burgmann Anglican School	777
4	Canberra Grammar School	
5	Hawker College Green	
6	Lake Ginninderra College	
7	Daramalan College	
8	Melba Copland Secondary School	
9	Radford College	
10	Hawker College Blue	
The Maths Day Trophy is won by the team with the highest total score.		
CITY AND COUNTRY SHIELDS		
SCHOOL		
CITY		
1	Burgmann Anglican School	
2	Daramalan College	
3	Lake Tuggeranong College	
4	Melba Copland Secondary School	
5	Hawker College Green	
6	Lake Ginninderra College	
COUNTRY		
1	Moss Vale High School	
2	Young High School (Daramalan)	
3	St Pauls International College	
4	Monaro High School	
5	Bega High School	
6	Mulwaree High School	

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Example of Restrictions (Limit Teams/Score Display)



This is what you are presented with before seeing the report, just hit **OK** unless in the unlikely event that you wish to change restrictions.

2.3.9 Top *City* Schools (End Of Day – A Copy to All *City* Schools)

This report lists the top *City* schools in each of the 5 contests (and Total Overall) ranked by *Total* Score in each contest.

The listing of scores is also restricted to a specified number of teams and the scores displayed is also restricted. See note above regarding the restrictions.

MATHSDAY – ScoreKeeper System Documentation

Example of Top City Schools Report (1 copy to each City School)

ANU MATHS DAY - 2009

Top CITY Schools

GROUP		
1	Narrabundah College 1	225
2	Canberra College	215
2	Canberra Grammar School	215
4	Radford College	
5	Lake Tuggeranong College	
6	Hawker College Green	
7	Daramalan College	
8	St Edmund's College	
9	Sydney Tech. High School B	
10	Lak & Na	
Mean Score in contest		169

SWISS		
1	Marist College Canberra 1	260
2	Melba Copland Secondary School	250
3	Hawker College Green	220
4	Narrabundah College 1	
4	Radford College	
6	Burgmann Anglican School	
6	Daramalan College	
8	Canberra Grammar School	
9	Hawker College Blue	
10	Narrabundah College	
Mean Score in contest		158

POSTER		
1	St Clare's College	89
2	Burgmann Anglican School	84
3	Trinity Christian School	81
4	Erindale College	
4	Marist College Canberra 2	
6	Merici College	
7	Hawker College Green	
8	Lake Ginninderra College	
9	Hawker College Blue	
10	Marist College Canberra	
Mean Score in contest		70

CROSS		
1	Burgmann Anglican School	208
2	Lake Ginninderra College	188
2	Narrabundah College 1	188
4	Marist College Canberra 1	
4	Narrabundah College 2	
6	Canberra College	
7	Canberra Girls Grammar	
8	Daramalan College	
8	Marist College Canberra 2	
8	Sydney Tech. High School	
Mean Score in contest		157

RELAY		
1	Lake Ginninderra College	150
2	Lake Tuggeranong College	140
2	Sydney Tech. High School B	140
4	Burgmann Anglican School	
4	Canberra Grammar School	
6	Sydney Tech. High School A	
7	Hawker College Green	
8	Daramalan College	
8	Melba Copland Secondary School	
10	Marist College Canberra	
Mean Score in contest		98

TOTAL		
1	Narrabundah College 1	789
2	Marist College Canberra 1	783
3	Burgmann Anglican School	777
4	Canberra Grammar School	
5	Hawker College Green	
6	Lake Ginninderra College	
7	Daramalan College	
8	Melba Copland Secondary School	
9	Radford College	
10	Hawker College Blu	
Mean Score in contest		648

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2.3.10 Top Country Schools (End Of Day – A Copy to All Country Schools)

This report lists the top *Country* schools in each of the 5 contests (and Total Overall) ranked by *Total* Score in each contest.

The listing of scores is also restricted to a specified number of teams and the scores displayed is also restricted. See note above regarding the restrictions.

Example of Top *Country* Schools Report (1 copy to each *Country* School)

ANU MATHS DAY - 2009

Top COUNTRY Schools

GROUP		
1	St Pauls International College	195
2	Moss Vale High School	162
3	Bega High School	155
4	Trinity Catholic College	
4	Young High School (Daramalan)	
6	Chevalier College	
7	Monaro High School	
8	Mulwaree High School	
Mean Score in contest		139

SWISS		
1	Moss Vale High School	200
2	Young High School (Daramalan)	150
3	Mulwaree High School	140
4	Monaro High School	
5	Chevalier College	
6	St Pauls International College	
6	Bega High School	
8	Trinity Catholic College	
Mean Score in contest		127

POSTER		
1	Bega High School	85

CROSS		
1	St Pauls International College	156

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2.3.11 Complete Scores and Ranks (Optional – Not For Publication)

This report lists all Teams by *City* and *Country* in Alphabetic order (probably Team Code really but usually the same thing) and lists team's scores and the teams ranking in each contest. This is a turn on for the analysts.

ANU MATHS DAY - 2009						
Complete Scores and Ranks by Section						
Saturday, March 27, 2010, 2:28:51 PM						
SCHOOL	GROUP	SWISS	POSTER	CROSS	RELAY	TOTAL
	250 R	300 R	105 R	240 R	210 R	1105 R
CITY						
Burgmann Anglican School	140 (18)	210 (6)	84 (2)	208 (1)	135 (4)	777 (3)
Canberra College	215 (2)	55 (24)	62 (17)	176 (6)	100 (11)	608 (16)
Canberra Girls Grammar	123 (24)	155 (13)	65 (16)	172 (7)	75 (17)	590 (18)

2.3.12 Executive Results Summary (Optional – Not For Publication)

This report was originally produced for release to the press but ahsn't been used in a few years so the surrounds is out of date. The main document is a *Word* document in the *ScoreKeeper System* directory called *ResultsSummary.doc* and appropriate data is *merged* into it.

The report can be used to confirm winners in the *Trophy* and *Shield* events as well as the *Poster* awards.

Use this option with caution as it is outdated.

2.3.13 Individual School Reports (End Of Day – A Copy of the Appropriate School's Report for Each School)

This report is a *merged* Word document for each school containing scores and restricted rankings in each of the 5 contests as well as the Total Overall.

Follow these steps:

- Hit *OK* to *Change* Restriction
- Hit *OK* to info on where data for *merging* is saved
- A grid containing all data is displayed. This is just the SkoreKeeper's workings for the final merge.
- Select *Options/View in MS Word* to open *Word* and merge data into it.

Note: - The document body is in a *Word* document (ASRMaster.doc) in the *ScoreKeeper System* folder and the *merge* data (AllSchoolsRep.txt) is in the current Mathsday folder.

- If *Word* doesn't open you should go back to *Setup/ScoreKeeper Options* and change the *Path* for *Word* (or *Winword.exe*). Use the *Windows Search* function and look in the *C:\Program Files* folder. It is usually in *C:\Program Files\Microsoft Office\Office xx* (where *xx* is appropriate to the version of *Office*)
- You may be asked some tricky questions about SQL but just answer *OK* to eventually open the *merged* document.
- Bring up the *Merge View (Mailings in Word 2007)* and *Preview* a few pages (using arrows) making sure as best you can that the scores look OK for the school displayed.
- Once satisfied, print the *merged* document (*Finish & Merge* in *Word 2007*). A page should be printed for each school with the school's results for each contest
- *Exit Word* but don't Save. Don't worry if you save though (not the end of the world).

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- There is an option to *Print Minimised* but it's unsure how this would behave. Better to *View in Word* first before printing.

Example of Individual School's Report (The appropriate copy to each School)

RESULTS

ANU Maths Day - 2009 School Results



Team Details

Code	Name	Location
B2	Hawker College Blue	City

Poster Contest

Graph	Maths	Comp	Total	LRank	ORank
27	35	11	73	9	12

Group Contest

G1	G2	G3	G4		
15	0	20	20		
G5	G6	G7	G8	G1 - G8	
25	25	30	30	165	
G9	G10			G9 - G10	Total LRank ORank
0	0			0	165 9 13

Swiss Contest

R1	R2	R3	R4	R5	Total	LRank	ORank
20	60	60	60	0	200	9	9

Cross Contest

Total	LRank	ORank
...

Appendix A: Timetable Of Events

Before The Day:

- Update the *Master File* (if not already done). The *ReadMe.txt* file should indicate when it was last run.
- Load the Teams for the current Maths Day
- Change any predefined Scores (only applicable if max values for a contest question have changed)
- Define the Swiss *Sites* (**mandatory**, even if you have to take a team out and put it back in but you must Save – sorry, design fault – will fix one day)
- Change any ScoreKeeper options, particularly the path for *Word* if applicable. Test by doing a *Reports\Individual Schools Report* with data for a previous year.
- Make sure appropriate printer drivers are loaded and run a few reports including *Z-Scores List*, *Head To Head* report for the *Swiss* contest and *Overall Results* using data from a previous year
- Run and print the previous year's *Z-Scores* list and check that Teams have been entered correctly, that they have been assigned *City* or *Country* correctly and that they have been assigned the correct *ZScores*.

You are ready to go

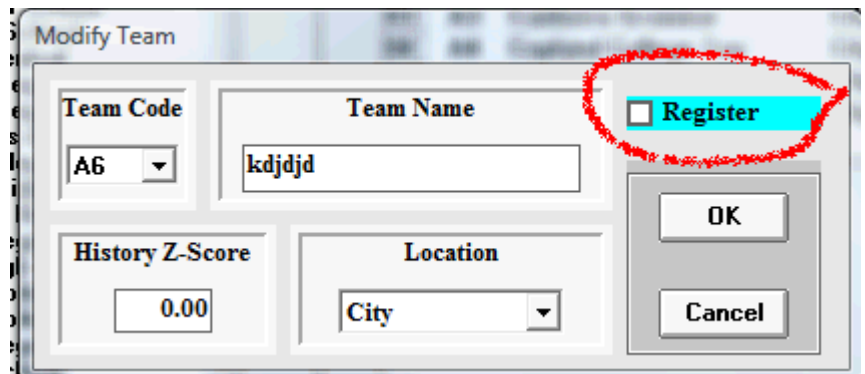
Maths Day – Morning – Before entering data for the first (*Group*) Contest:

- Connect the computer, monitor (if applicable), keyboard (if applicable) and printer.
- Note: It's a good idea to have a USB port free to attach a thumb drive and take regular backups of the Maths Day DB during the day (in case something gets corrupted – never happened in the past but you never know).
- Test printer by doing prints suggested under *Before The Day* above.
 - Delete any late cancellations (teams that couldn't make it for some reason) and add any makeup teams

MATHSDAY – ScoreKeeper System Documentation

so that there is an even number of teams competing on the day. This is done via *Setup\Teams*.

Remember not to *Register* makeup teams that you don't want to be eligible for awards at the end of the day or to contribute to handicap calculation. You will have to add them first by selecting the *New* button and then *Modify* them (*uncheck* Register) to *deregister* them.



- Wait for *Group Contest* scores for entering of *Group* Questions 1 to 8.

Maths Day – Morning – Competition Underway (*Group & Swiss*):

- Enter *Group Contest* Scores 1-8 when they become available. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- Run and Print *Head To Head* reports for the first 2 rounds of the *Swiss Contest* (*Contest\Swiss\Report\Head To Head*) and hand printout to person making announcements out front so the *Swiss* contest can get underway.

Note: Ensure *Swiss Sites* are numbered A2, A4 etc (see *Before The Day* above) and that the Round number is printed or written by hand on top of the printout.

- **Swiss Round 1**

- Enter *Swiss* contest *Round 1* scores when available. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- Run and Print *Head To Head* reports for the 3rd round of the *Swiss Contest* (*Contest\Swiss\Report\Head To Head*) and hand printout to person making announcements out front. You should always be 2 *Head To Head* reports ahead. ie You have just entered *Round 1* and produced a *Head To Head* for *Round 3*.

- **Swiss Round 2**

- Enter *Swiss* contest *Round 2* scores. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- Run and Print *Head To Head* reports for the 4th round of the *Swiss Contest* (*Contest\Swiss\Report\Head To Head*) and hand printout to person making announcements out front.

- **Swiss Round 3**

- Enter *Swiss* contest *Round 3* scores. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- Run and Print *Head To Head* reports for the 5th round of the *Swiss Contest* (*Contest\Swiss\Report\Head To Head*) and hand printout to person making announcements out front.

- **Swiss Round 4**

- Enter *Swiss* contest *Round 4* scores. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- No need to run any more *Head To Head* reports, there are 5 rounds in the *Swiss Contest* and you should have already produced a *Head To Head* report for the 5th round.

- Swiss Round 5

- Enter *Swiss* contest *Round 5* scores. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- No need to run *Head To Head* report. *Swiss Contest* is complete.

Great!! Well Done!!!

Maths Day - Lunch:

- Enter Group Contest Scores for Questions 9 and 10 and check that Group Contest Totals are correct
- Enter individual scores for Group Contest Q1 – Q8 if you didn't do it earlier and confirm that Totals match
- Enter Poster scores (need to obtain sheets from volunteer scorers). Not all teams participate in the *Poster* contest but ensure (double check) that all competing teams are entered.
- Check ScoreKeeper data against Supervisor's progressive scores so you can be confident that data is entered into *ScoreKeeper* correctly.

Produce a listing of *All Schools Progress Report By Team Code* (using the *Main Menu Reports* option) and compare with manual scorers if they exist or Supervisor's progressive score sheets if you can get hold of them. Be warned though, Supervisor's progressive score sheets can be incomplete or just plain wrong.

If not, just check that scores look reasonable. You can also do an *All Schools Progress Report by Score* to see if rankings look reasonable.

These are useful ways to ensure that data has been entered into ScoreKeeper accurately and you can relax over lunch in preparation for the afternoon.

- ***** Enjoy lunch and RELAX!!!! *****

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Maths Day – Afternoon – Competition Resumes (*Cross & Relay*):

- Enter *Cross* Contest Scores. Ensure data is loaded for all teams (Double click to get Teams Selection list or *Report/Missing Teams*).
- Enter *Relay* Contest Scores. There will be up to 4 sheets coming in for each team but many teams won't get past 2 so it is hard to determine if all possible score sheets have come in for data entry.

All teams should at least hand in 1 sheet and maybe 2 so you can use the normal methods to look for missing teams, otherwise just ask collectors to hound supervisors.

Keep going till entered and remember, it gets a bit frantic at the end.

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Maths Day – Afternoon – Competition & Data Entry Completed

Printing Final Reports

It is important to run reports in a timely manner as presentations are made and travelling schools need to get away at a reasonable time.

The reports are used to determine award winners and printed reports are handed to schools as they leave.

- **Check ScoreKeeper Totals** (*Reports\Check Teams Grand Totals*)
- **Run Z-Scores List** (*Reports\Z-Scores List*) and Exit
- **Run the Overall Results report** (*Reports\Overall Results*) to determine the top 3 schools in the *Trophy* competition (Highest 3 *Total Scores*) and the best *City* and *Country* schools and advise the MathsDay convener. You can print this report but the report is not to be made public.
- **Run the Top Schools Overall report** and print as many copies as there are participating teams as a copy should go to each team. (*Reports\Top Schools Overall*)
- **Run the Top City Schools report** and print as many copies as there are *City* teams as a copy should go to each *City* team. (*Reports\Top City Schools*)
- **Run the Top Country Schools report** and print as many copies as there are *Country* teams as a copy should go to each *Country* team. (*Reports\Top Country Schools*)
- **Run the Individual School Reports** (*Reports\Individual School Reports*).

Remember to choose *Options\View in MSWord* which will produce a *merged* document which will generate a separate page of a Team's Scores for each school.

Print the entire document but remember not to *Save* on Exiting *Word* (don't worry if you forget though – we have plenty of backup).

- Collate printed documents and hand out to schools as they leave.

Congratulations!!!

That's it!!!! You've Done well!!!

Take a deep breath and enjoy a well earned break!!!!

Hopefully everyone, including you, has had a great time !!!

See you next year!!