

JUDGING COMMITTEE POLICY AND PROCEDURE MANUAL

Part II

Revised 3/19/20

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* Procedures that may work for the 2021 Exhibition ONLY.

+ Programs/forms on judging committee laptops

Section A – Policy Information

The major publication for the Judging Committee is the Judging Handbook which is online at the Science Fair website. This includes the scoring rubric and descriptions of the types of things that a judge should look at when evaluating a student's project. Forms for former judges to respond to and to recruit new judges are also online.

It is the policy of the Judging Committee to assign judges to students on a random basis within the experience range of the judges. This means that all exhibits will have a mix of experienced and new judges and that no project will be judged solely by new/first time judges.

It is the policy of the Judging Committee to have every project judged at least 5 times. When the scores are tabulated, the high score and the low score are then discarded and the remaining three or more scores are averaged.

Summary of Judge Assignments

All students will be judged a minimum of 5 times

All students will be judged by judges with a specialty comparable with the subject of their research.

All students will be judged by judges with a wide range of judging experience.

No judge will be assigned more than 5 high school level or 6 elementary level projects.

Rubrics will be appropriate for the type of investigation being performed.

Section B – Procedural Timeline

Between Christmas & New Years

Have the Data Entry person send letters to prospective judges from the current data base. Generally mailed on or before December 31. See part 1 of the Judging Policy and Procedures manual.

January to the Saturday before Fair

Have the Data Entry person receive the letters returned by prospective judges and enter the correct data into the Judges' MSAccess data base. Remind the Data Entry person that any judges that are entered after this date should be given an active category of 'Substitute'.

After the Credentials Committee completes proofing the student entries

Download the student data and create 2 files. '20?? Exhibits-1 line partners.xls' and '20?? Exhibits-2 line partners.xls'. The 1 line file, as downloaded, contains BOTH partners on the same line. If the Network and GSR are not included, sort this list by school and go through this list as compared to a CPS Master list of schools and add the Network and GSR to each exhibit. To create the 2 line file, go through the 1 line file and duplicate each line where partner is listed and then shift the name and address data of the partner over to match the formatting of the other lines. This file will be used to produce individual labels and award certificates. Save the 2 line list as '20?? List as For Program book' then delete all columns EXCEPT Exh#, Name, Grade, Category, Title, Network and School. Send this to the graphic artist and use this for matching.

Friday before the Fair (one week before Fair)

IMPORTANT - Delete from the computer(s) you will be using all of last year's data. (The easiest way is to open a 'Command Prompt', change to the Scifair directory (cd\scifair) and run 'cleanup'. DO NOT run this again as any data you have created for the current year will be lost!)

Make sure that the Chairman, Credentials and Data Entry committees know that there can be **NO CHANGES** to the student exhibitor information. Any change to the category, level or student's last name can cause Zoho to renumber and resort the exhibits.

Time Required = 1 hour

Weekend before Fair – at home

A. Creating a MASTERFILE.xls –

- Export from the MSAccess data base **MASTERFILE EXPORT.xls** to the scifair directory
- Delete the contents of the current **MasterfileWITH MACROS.xlsm** **leaving only the headers**

⁺ Programs/forms on judging committee laptops

- Copy the contents of **MASTERFILE EXPORT.xlsx** and paste them into **MASTERFILE.xls** **DO NOT** just rename/replace the file as you will lose the macros that are part of **MASTERFILE.xls**.
- If any of the ‘Company’ cells are either blank or contain <no company> replace (or add) an *.
- Either run the two Macros available (MakeActiveCat1 & NametoNumber) or do 16 global changes on the category columns (in the ‘More’ section of the ‘Find and Replace’ checking ‘Find whole words only’) as follows – keeping track of how many changes were made for each category:
 - ‘Aero-Space Science’ to 1
 - ‘Behavioral Science’ to 2
 - ‘Biochemistry’ to 3
 - ‘Botany’ to 4
 - ‘Chemistry’ to 5
 - ‘Computer Science’ to 6
 - ‘Earth Science’ to 7
 - ‘Electronics’ to 8
 - ‘Engineering Science’ to 9
 - ‘Environmental Science’ to 10
 - ‘Health Science’ to 11
 - ‘Materials Science’ to 12
 - ‘Mathematics’ to 13
 - ‘Microbiology’ to 14
 - ‘Physics’ to 15
 - ‘Zoology’ to 16
- Finally, delete any blank columns.

Save this file as **MASTERFILE.xls with headers of**

Judge #	Name (Last)	First)	Employer	Cat 1	Cat 2	Cat 3	Active Cat	(Header continued)
Active Level		Years Served						

If you DID NOT run the two Macros in the previous step, make sure that the Active Cat column is the same as Cat 1. If in doubt, copy column Cat 1 to Active Cat

B. Honored Judges List. Ask Yolanda to either print the honored judge certificates or send you a current copy of **HonoredJdgData.xlsx**. Delete all judges who HAVE NOT served some multiple of 5 years. Finally print the Honored Judges’ Certificate list for 5, 10, 15 years, etc.by using the template ‘**HonoredJdgCert.doc**’ in the \Scifair directory to do the mail-marge and print the certificates. (Be sure to change the date.) Send this list, with contact information (addresses, phone and/or e-mail) to Ethelene so she can send them letters inviting them to the fancy luncheon to be recognized.

C. Matching Judges to Exhibits. Sort MASTERFILE.xls by Cat 1 then Cat 2 then Cat 3. Set the print area as Judge # through Active Cat and print this file.

(Continued)

Print a list of student exhibits in order by category then project number so we can determine how many exhibits are in each category – under the ‘Data’ tab pick ‘Subtotal’ then ‘Active Cat’ and ‘Count’. Finally check the print preview and look at ‘Scaling Options’ and select ‘Fit all columns on one page’.

+ Programs/forms on judging committee laptops

To determine how many judges we need in a category, we first count how many exhibits are in a category. We then need to find a combination of blocks TIMES judges that equals the number of judges needed in that category. For example, if there are 24 exhibits in a category we would have 4 blocks of 6 exhibits. Since we want 7 judges per block we would need 28 judges. Or, if there are 19 exhibits we would have 3 blocks of judges, (2 blocks of 6 exhibits and 1 block of 7 exhibits which totals 19 exhibits) and would need 21 judges. Our goal is to assign at least 7 judges to each project.

We can now make a chart of how many blocks of judges we need for each category, how many judges we already have for each category, how many extra judges we have in each category and/or how many judges we are short in each category.

Category	# of exhibits	# blocks times # of exhibits	# Of Blocks x 7 (7 judges for each block)	Number of Judges Needed	Number of judges we have	# Of judges over or under
Example from Cat. 2	13	2X6 (2 blocks of 4) 1X5 (1 block of 5)	3X7	21 (3x7)	(count first choice)	(do the math)

See Appendix 2 for a more complete example.

We then look at the categories where we have more judges than needed and reassign some of them to categories where they are needed. They will be assigned to their second choice if possible or their third choice as a last resort. If more judges are needed than available the number can be reduced from 7 per block but, in no case should it be less than 5. As a last resort, we call possible judges and ask them if they can judge exhibits in the category where they are needed.

NOTE: This is really a one person job that may take several hours, especially if there is a great imbalance between what is needed and what is offered.

Time required = 2-3 hours for 1 person plus 3-5 minutes per plaque.

Once we have enough judges in each category, we then go through the list one at a time changing the **active** (yellow?) category for any judge who is not assigned to his/her first choice. See Appendix 3 for a more complete example.

After reassigning the judges to the wanted ACTIVE category, save it to 'PJudgesFull.xls'. Using PJudgesFull.xls, reformat it to include the following fields: *Judge #, L Name, F Name, Company, Active Category number, Years Served*. Concatenate the *F Name* and *L Name* into a column labeled *Name*. Copy the resulting column and 'Paste Special – values'. Sort this by *L Name* and *F Name* and save it as 'PJudges Alpha List'. Delete the *L Name* and *F Name* columns and print this list. A pure text list of active judges sorted by judge number then needs to be created. Resave it as 'PJudges.xls' and delete the years of service column and the header row. Add a column between *Name* and *Company* (Column C) and replace the data in that column with a column of @ signs. Finally, resort all of the data by column A (judge #). It should then have NO HEADER lines and exactly five columns (*Judge #, Judge Name, a column of @ signs (to act as a delimiter), Company Name, and Active Category #*). Save it as a **.csv** file - 'PJudges.csv' in the scifair directory⁺. The program FixJudge⁺ (a DOS program) is then run to create a file named 'PJudges.act'. Open a 'Command Prompt' window (in the 'All Programs' then 'Accessories' list), change to the Scifair directory (cd \scifair) and do a screen list of PJudges.act ('type pjudges.act') to verify that the following fields are in 'PJudges.act': *Judge #, Name,*

⁺ Programs/forms on judging committee laptops

Company, Active Category Name (and are neatly columnized). NOTE: After you type ‘type pjudges.act’ and hit Enter, the list will fly past quickly – just look at the last couple of lines and be aware that they may wrap with the last part of the category on the next line. DO NOT use Notepad or any other program to edit or resave this file as it will get reformatted!

Time required = 3 hours for 2 people.

Tuesday (At home)

Judges can now be assigned to exhibits using J-PMATCH⁺ (a DOS program using DOSBOX). The program has the user enter a block of exhibits (by project number) and the specified number of judges is assigned to these exhibits (by judge number). In general, if there are four blocks, every fourth judge is assigned to that block. This procedure insures that all exhibits have judges with a wide range of experienced. This process is continued until all exhibits have been assigned judges. The files produced by this program (EXMATCHP.DAT and EXMATCHJ.DAT for the Exhibits and SYMATCHP.DAT and SYMATCHJ.DAT for the Symposium)⁺.

Next the following labels and lists are created in either MSWord or MSEXcel:

- Judges Labels for Pandaflex Folders in judge number order or project number order by merging PJudges.act and EXMATCHJ.DAT side by side into MSEXcel, **checking that the judge numbers match** then resort by 1) first **project** number then 2) Judge number. Save this as PandaflexData.xls. You can then then create and print the labels from that file through the MSWord mail merge option. Include the year (i.e. 2019) after the judge’s number and highlight it some other color that does not match a recently used color so we can tell that it is a current label. (COLORS USED – 2017-Yellow, 2018-Blue, 2019-Red)
- Print a judging Stuffing List (shows all the judges for each project in order by project #) by importing EXMATCHP.DAT into MSEXcel, and highlighting the Design exhibits in yellow then reformatting for the printing (i.e. enlarge and add a larger line spacing. This will give you a printed list of PROJ# JNUM1 JNUM2 JNUM3 ...)

Time required = 4 hours for 2 people.

Tuesday (On Site)

Ten full sized (8’) tables are needed on stage set up in two rows – one for judges’ packets the other for sorting and temporary storage.

Do the following:

- Bring with and set up computer, printer and Scantron scanner
- Setup Pandaflex Folders for Judges (used to stuff judge’s materials)
- Put Judge’s Labels on the folders’ tabs in the desired order using glue sticks to hold them on
- Use index cards to label the grouped exhibits and have them higher than the folders. Staple these index cards on different colored folders than the judges’ folders.
- Begin stuffing student papers.
- Answer phone.
- Sharpen pencils.
- Set up category signs.

⁺ Programs/forms on judging committee laptops

Time required = 2 hours for 2 people.

Wednesday

- Print a list of these honored judges so they can be checked off as they pick up their plaques.
- Produce notes for judges receiving plaques.
- Stuff Project Papers into judge's folders – check off stuffing sheets as papers are put into folders.
- Print an alphabetical list of judges along with their active category name using either or resaving and reformatting MASTERFILE.xls.
- Answer phone.
- Stuff each folder with comment cards (one per student), rubrics (one per student) and a map (if available.)
- Print Judges Check-In Sheets in order by category. Use either EXMATCHJ.DAT or PJudges.csv resorted by project, imported into MSExcel and reformatted with leading columns of <Returned> and <Judging>. (Used to sign judges In and Out when they pick up their packets on Friday.) The coordinator marks an X over JUDGING when the judge picks up a packet, and later, when the judge returns the packet, marks an X over RETURNED. This is done for two reasons: first, we can quickly see if we have at least 5 judges out for a particular block of exhibits and, if not, other judges can be asked to judge that block and, second, we can monitor whether the judges have brought back the packets.
- Place extra student papers in racks ordered by project numbers.

Time required = 5 hours for 3 people (plus 4 MSI volunteer helpers).

Thursday (morning)

- Print Judge's Name Tags⁺ (to be given to judges when they check in at the front tables). Resort MASTERFILE.xls into alphabetical order and then use MSWord's mail merge and 'JudgesNameTags.jpg' to print them.
- Print Scantron score sheets (using printcar⁺ in scifair directory). Printcar will ask if you are printing Project or Symposium score cards and whether you want them sorted by judge number or project number. Make note of how many were printed. NOTE: The printcar program prints to LPT1 – a parallel port. If you are trying to print to a USB printer, make sure the computer has the program 'printfil' running. A trial copy of printfil can be downloaded from <http://www.printfil.com/english.htm>. Stuff them into proper folders.
- Finish stuffing Project Papers into the judge's folders – check off stuffing sheets as papers are put into folders.
- Check to see that all of the judge's folders have the following:
 - Project Papers for each project to be judged
 - Comment Cards
 - Scantron score sheets
 - Floor plan/map

⁺ Programs/forms on judging committee laptops

Rubrics

No Shows (if any)

Any special instructions needed for individual students. (i.e. 'Design' project or NO SHOW, etc.)

Time required 5 hours for 3 people (plus 4 MSI volunteer helpers).

Thursday (afternoon)

- If the labels were not printed by category and block, then, after all materials have been stuffed, rearrange the judge's folders in order by category then project number(s) then alphabetical within each group
- Put out clipboards, pencils and program books
- Put out check in sheets (you may need to use a version of PJudges.act in Excel to print this.) See the 7th bullet in Wednesday's schedule.
- Print coordinators Instructions⁺ and New Judges form⁺
- Answer phone
- Have extra rubber bands for student papers to bundle them up after judging.
- Have on hand for Friday:
 - • Alpha list of judges
 - • No Show list
 - • List of exhibits
 - • Extra Scantron sheets
 - • Extra comment cards
 - • Extra rubrics – white, yellow and, if used, blue.
- Set up bins to receive items back from the judges on Friday:
 - • Used comment cards
 - • Blank comment cards
 - • Used rubrics
 - • Blank rubrics
 - • Pencils
 - • Clip boards
 - • Garbage
 - • Judge's name badge holders
- Process Symposium scores and produce their results

Time required = 3 hours for 4 people.

Friday

- Have extra parking vouchers on stage.
- Hand out Judge's Name tags and parking vouchers as the Judges come into the fair (need 2 people at the reception tables plus one for the vouchers).
- Check on Project No-Shows – make sure we have an updated list – keep one, put one on stage – put one in computer room.

⁺ Programs/forms on judging committee laptops

- Mark cancelled judges so they can be replaced with new people.
- Have “New Judges Sheets” available for ‘walk-in’ new judges.
- Instruct Coordinators about what to tell the judges
- Pass out judge’s packets – mark JUDGING
- About 8:30 give instructions to the judges
- About 9:30 check to see if we have at least 5 judges out for each group of exhibits in each category. Any with less – FLAG and try to find judges to take some of them.
- Remove all the empty folders (allowing us to see how many packets still need to be picked up).
- Arrange back tables to receive back students papers and arrange in order by project numbers
- About 10:00, set up Multiyear plaques for honored judges (have a list) and check off when the judges pick them up
- Leave category signs up with check in sheets next to them to receive score sheets and other stuff (especially all rubrics) from judges when they turn materials back in – check the RETURNED mark on the check in sheet.
- Check Scantron scoresheet to see if it is OK, give the judge a gift and thank them.
- Send the Scantron scoresheets up to computer room for scanning.
- Sort all returned or unused papers into project number order.
- Sort comment cards – return to exhibits
- After all judges have returned pack up the remaining honored judges plaques for reuse.
- Collect and send the unused score sheets to the computer room
- Scan Scoresheets⁺ (see pages 18 & 19) keeping track of how many are run through. Add the scanned number to the No-Show judge’s unused sheets and compare that with how many were printed. Typically we lose 5 or 6. Run ‘missing’ to determine which ones are missing. When you feel that you have received all of the score sheets that will be turned in, run ‘Scanhec’⁺ to check the markings i.e. no double, no blank spots, etc.
- Use the program ‘Avg2file’ to Assign Scores* (highest and lowest scores will be dropped for each project.) Create Gold, Silver or Bronze awards.* The top 35 high school exhibits and the top 15 elementary exhibits will receive a ‘Gold’ award. The Silver and Bronze awards will be split among the remaining exhibits. See Appendix 4 for how to do this by hand.
- Print results and take them to the Executive Director & Chairperson.
- Save check in/out sheets to note any walk-in judges and which exhibits they judged.
- Print the certificates in exhibit number order for Gold, Silver, and Bronze awards and take to little theater to be stuffed in student’s packets
- Take down all folders and supports
- Collect and save for later the unused Judges name tags – the ‘No Shows’

Time required = 4 hours for 9 people in the morning
2½ hours for 3 people to collect judge’s materials,
2 hours for 3 people to sort all the research papers
2½ hours for 2 people to scan the Scantron sheets and pass them to database.
2 hours for 2 people to print various lists and certificates.

⁺ Programs/forms on judging committee laptops

Saturday or Sunday

- Pick up the Scantron card reader, computer(s) and printers.
- Go home and rest!

Time required = 2 hours for 1 person

After the fair

- Go through the MSAccess data base with the 'No Show' judges and change the 'Last Year Served' to the previous year and subtract 1 from the 'Years Served' – leave the 'Last Year Replied' as is.

Time required = 1 hour for 1 person

An approximate total of 180 man hours.

Computer Inputs and Outputs

Inputs

1. Change Judges' Active Category
2. Assign Judges to Exhibits⁺
3. Read Scantron sheets⁺
4. Import Scores
5. Assign Scores for Gold, Silver, and Bronze

+ Local programs or files are used for these

* Derived by reformatting from the MASTERFILE.XLS download and using nail-merge

Outputs

1. Print Judges' Alpha List*
2. Print Judges by Active Category*
3. Print Judges' Labels for Folders*
4. Print Stuffing sheets*
5. Print Judges' Check-in sheets*
6. Print Judges' Certificates*
7. Print List of Judges' Names who are receiving certificates*
8. Print Judges' Name Tags*
9. Print Score Sheets⁺
10. Print Coordinators Instructions⁺
11. Print New Judges Forms⁺
12. Print Results sheet⁺
13. Print Student certificates⁺

Section C – Resources and References

Judging Committee

Chairman

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Retired

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⁺ Programs/forms on judging committee laptops

Appendix 1 – Judge’s Years of Service Correction

If a judge responds to the initial mailing with a question about his/her years of service or a correction to that piece of information, there are several ways of making the correction depending on various factors. Go into Zoho, sign in as administrator and then go to the ‘Reports’ section. Pick ‘Exhibits Judges Request Letter’ and search for the judge you want to change. Scroll all the way to the right and overwrite the number in the ‘Total Years Served’ column.

Appendix 2 – Judge’s Reassignment of Active Category

My grid sheet looks like the following:

Example
Cat – 2 →
Behavioral

	Cat	#Proj		Need	HAVE	Δ	-	+	Δ
AeroSpace	1	6	1x6	7	7	0			0
Behavioral	2	13	2x4 1x5	21	29	+8			+6
Bio Chem	3	11	1x5 1x6	14	14	0			-3
Botany	4	17	2x6 1x5	21	10	-11			-6
Chemistry	5	44	4x6 4x5	56	28	-28			-5
Comp Sci	6	4	1x4	7	13	+6			+2
Earth Sci	7	2	?	7	9	+2			+2
Electrics	8	3	!	7	30	+23			+26
Eng Sci	9	28	3x6 2x5	35	64	+29			+11
Environ	10	22	3x4 2x5	35	30	-5			-6
Health Sci	11	20	4x5	28	43	+15			+9
Math Sci	12	16	2x5 1x6	21	10	-11			-5
Math	13	18	3x6	21	14	-7			-4
Music	14	15	3x5	21	20	-1			-2
Phys	15	32	4x5 2x6	42	23	-19			-2
Zool	16	2	?	7	17	+10			+2

Notice that Behavioral Science (category 2) has 13 exhibits (#Proj column). Doing the math to keep the number of exhibits that each judge gets leads us to the need for 3 groups since 2 groups would require a group of judges to have 7 exhibits. If each group is to be assigned 7 judges then we will need 21 judges (3x7) (Need column). By counting the number of judges who have ‘2’ listed in their ‘Active’ category (from printed listing) we find we have 29. Since we only need 21, 8 of these judges will need to be assigned to another category (Δ column). Note that Chemistry (category 5) is the shortest so see if any of the category 2 judges have 5 as a SECOND choice and reassign them. Note the two tick marks in the minus (-) column while category 5 would get two tick marks in the + column. Continue this with all of the other subjects. When the sheet gets messy, do a new Δ column. Keep doing this until, if you are lucky, the final Δ is zero.

In some cases you might need to take someone out of a category they want because you need them elsewhere and causing you to search for a replacement. (See next page.)

When all is done, replace any changes in a judge’s ACTIVE category to match which category they will actually be judging.

Appendix 3 – Judge-Project Matching

This is an example of the final judges listing for Category 2 (Behavioral Science) sorted by Active Category. (Active)

✓1	149	Abdul-Taniyu	Rashida	2	2	1	2	2	2	1	2	0
✓2	194	Gray	Jami	2	2	11	2	2	1	1		0
✓3	249	Hull	Angela R.	2	10	13	2	2	2	1	2	0
1	113	Jurczewski	Pat	2	2		2	2	2		2	0
2	72	Kazez	Rachel	2	2		2	2	1	1	1	0
3	259	Khan	Mohammad	2	9	8	2	2	2	2	2	0
1	153	Knox	Colton	2	11	10	2	1	2	1	1	0
2	254	Marlin	Daryl	2	9	8	2	2	2	2	2	0
3	151	Pagano	Lauren	2	2	11	2	1	2	1	1	0
1	302	Vargas	Magdalena	2	6	13	2	1	2	1	1	0
2	192	Wee	Rebecca	2	11	6	2	1	2	1	1	0
3	232	Wigger,PE	John	2	2		2	2	2		2	0
1	974	Brauchia	Mary	2	2	11	2	2	2	2	2	2
2	825	Ciurdar	Nel J.	8	6	2	2	2	2	1	2	2
3	308	Chiu	Ashley	2	2	11	2	2	1	1	2	3
1	439	Vilas	Robert A.	2	11	13	2	2	2	2	2	10
2	150	Cole	Charles	2	11		2	1	1		1	13
3	739	Llanes	Luis	2	11	6	2	2	2	2	2	13
1	44	Pickard	Rheta	2	2	6	2	2	1	2	2	14
2	158	Verre	Margaret	2	7	10	2	1	1	2	1	19
3	291	Tam	Chuen C.	2	2	9	2	2	1	1	2	27
3	320	Binns	Barbara	2	2	3	2	1	1	2	1	32

(Note: 3rd choice)

Note that judge 825 has this category as her third choice because one of the 2's was needed to fill out another category.

Since there are 3 exhibit blocks, hand number along the left margin 1, 2, 3. The first block receives those numbered 1, the second 2, etc. If you have 5 blocks of exhibits, number them 1-5. That way each block of exhibits gets both first tie judges and experienced judges.

This year we actually had more judges than we needed so we added one extra judge to each category and assigned that judge to the highest block of exhibits – note the two 3's at the end of the above list.

Appendix 4 – Procedure to ‘Hand’ Rank Students

Once the score sheets have been collected, scanned and checked with Scanchec⁺ run avg2file⁺ (you may need to use DOSBOX to run it). This program will give you a listing by project number along with average score and a summary of the judges’ scores (negative scores were the ones dropped as either high or low). Import this into MSExcel and delete everything except the Exhibit Number, average and rank. (If there is more than one set, delete the entire second set.) If necessary, resort this by Exhibit number (column 1?). Merge this file with the student data file, making sure that the exhibit numbers match.

Resort this merged file by rank (high to low). Note that students with the same average may have different ranks. This should be fixed by manually changing the rank so everyone with the same average has the same rank. See this example:

Before				After		
Exh #	Average	Rank		Exh #	Average	Rank
213	92.5	7		213	92.5	7
145	91.0	8		145	91.0	8
098	91.0	9		098	91.0	8
290	91.0	10		290	91.0	8
072	90.5	11		072	90.5	11

Next, the top 35 High School (Secondary) exhibits are assigned a ‘Gold’ award (change the Average to GOLD and the top 15 Elementary exhibits are assigned a ‘Gold’ award. NOTE that you may need to skip some exhibits to arrive at the desired 35 & 15 split. If there is a tie for the 35th or 15th position consult with the IJAS chair about adjusting the overall number of student going to IJAS.

Again, resort this by Average and assign Silver, Bronze and NoShow awards. NoShows are easy, they have an average of zero. The breakoff point between silver and Bronze is somewhat subjective and should be agreed to by the Fair’s Chairman and Executive Director.

If you are going to upload the scores to Zoho, **do it NOW**. See Appendix 5.

Finally, if you are going to print the certificates, you need to go through and insert a line for each student who is a partner in a group project. For example, if project 212 is a group project, you will need to insert a line, copy over everything but change the student name to Student 2.

Before					After			
Exh #	Average	Rank			Exh #	Average	Rank	
211	92.5	7	Student 1		211	92.5	7	Student 1
212	86.5	138	Student 1		212	86.5	138	Student 1
213	91.0	9	Student 1		212	86.5	138	Student 2
214	79.0	225	Student 1		213	91.0	9	Student 1
215	90.5	11	Student 1		214	79.0	225	Student 1

⁺ Programs/forms on judging committee laptops

Appendix 5 – Uploading/Importing Certificate Awards

Sort your student data by Exh# and save it as ‘Upload Data’. Add a column on the left and insert the CW year (i.e. CW18 or CW19, etc.) on EACH line. (i.e. the entire first column will be the same.) The second column should be the Exhibit numbers (in order). The third column should be the rank and the fourth column the certificate. Delete everything else.

Your table should look something like the following:

Year	Exh#	Rank	Certificate
CW18	1	77	Silver
CW18	2	32	Gold
CW18	3	231	Bronze
CW18	4	129	Silver

Sign into Zoho as administrator and do the following: TBD

Appendix 6 – Converting .pdf Downloads to Excel

All of the reports available from AREV come down as Adobe .pdf reports and are difficult, if not impossible, to use in that form for anything other than printing. If the report has fairly even columns it can be converted to either MSWord format (.doc or .docx) or an MSEXcel format (.xls, .xlsx or .csv). In many cases the comma separated .csv format is the easiest to work with for producing labels, certificates, score sheets, etc.

If you have Adobe Acrobat it is possible to directly save the file as a Word or Excel document. Unfortunately the Excel file is usually unusable as the columns and/or rows get scrambled. (See below.)

If you do not have Adobe Acrobat, you can use the .pdf to Word converter available at <https://smallpdf.com/> by opening the PDF to Word box and dragging the downloaded .pdf file into the converter. Unfortunately using the PDF to Excel converter sometimes creates the same scrambled columns as the Adobe conversion. (See below.)

The best workaround to unscramble the columns/rows that has been found is to convert the .pdf file to Word and then copy and paste the contents of the Word file into an Excel spreadsheet. In most cases the rows will have the correct information but may be misaligned due to merged cells. To fix that, select the entire spreadsheet and then click the ‘Merge & Center’ tab in the ‘Alignment’ tools box. The last entry should be to ‘Unmerge Cells’ – click it to unmerge the hidden cells. This will leave some empty cell blocks in various places. Go through the file and delete the empty cells, shifting the columns to the left.

Once the Excel file is in good order, it should be saved in BOTH .xls (or .xlsx) format AND .csv format.

Appendix 7 – Procedure to Read Scantron Forms

How to Use the New Scantron OpScan/4es Scanner

- Connect the scanner and printer to a USB port
- Turn on scanner and then the computer – wait for it to boot then, if this is the first time scanning, go to the Scifair folder and delete pscor.es.???.?? and sscor.es.???.?? because, if you don't, whatever you will scan will be appended to these files.
- Run ScanTools.
- Choose the CPS Student Science Fair profile and 839 for the conversion and profile.
- Change the data file to 'pscor.es' if you are scanning exhibits and 'sscor.es' if you are scanning the symposium (see the second step if this is the first time you are scanning this year).
- Load 10-15 scoresheets by pressing the 'Load' button above the input hopper.
- Click the 'Scan' button on the computer screen.
- When you remove the scanned score sheets from the output hopper, place a divider between every 20-30 sheets with the sheet numbers (see the computer screen for the number of the last sheet scanned). This will allow you easier access to a particular score sheet should SCANCHEC detect an error.
- If an error is detected it will stop and ask you if you want to accept or rescan the form. Use your judgment.
- When done reading cards, select 'Stop Scanning'. Then Close all subsequent dialog boxes.
- Open a DOS box and go to the \SCIFAIR subdirectory (cd\scifair).
- If you are just starting out, delete SCORES and JCOUNTF.ILE. (If you ran 'cleanup' a week ago before starting, these will already be gone.)
- Run SCANCHEC<enter> using the above file name of pscor.es.sdf or sscor.es.sdf (**NOT** **.DAT** or **.TXT**). If this is the first time this year, you will be asked for low and high project numbers and a list of no shows. If old data exists, the information will be appended to SCORES and JCOUNTF.ILE. NOTE: SCANCHEC is a DOS based program and, as such, you CANNOT use the arrow keys or the mouse. You MUST use the spacebar and the backspace to make corrections.
- When you are done with scanner turn it off.