

APPENDIX

to the

VJAS Handbook

2012-2013

Appendix A – Useful Lists

- Checklist for Submitting Student Research Paper
- Student Paper Disqualification List
- Where to Enter “Consumer Science” Projects

Appendix B – Membership Forms

- VJAS Membership Applications: School & Individual
- Virginia School Regions

Appendix C – Forms for Paper Submission

- Student Entry Form
- Certification Statement Form
- Reader’s Evaluation Form
- Judge’s Evaluation Form
- Continuation Form
- VJAS Mentor Form
- Instructions for School & Individual Entry Forms

Appendix D – Special Forms & Related Guidelines

- Phil Robinson Research Grant Application
- Guidelines for the Phil Robinson Research Grant Application
- Special Interest Award Application
- Scholarship Application
- Application for Junior Officers
- Election Procedure for VJAS Officers

APPENDIX A

USEFUL LISTS

Checklist for Submitting Student Research Papers

Student Paper Disqualification List

Where to Enter “Consumer Science” Projects

CHECKLIST FOR SUBMITTING STUDENT RESEARCH PAPER

This checklist is designed to help the student and student sponsor avoid the pitfalls that disqualify student research papers. The rules and the items listed on the Disqualification List and in the Handbook are very specific and it is the responsibility of both the student and the student sponsor to be aware of them. Check and double-check to assure that your paper is in the proper form as outlined in the latest edition of the VJAS Handbook.

- ___ Student Entry Form (Page ONE): Answer every question including item #7. Must have student's AND student sponsor's signature. This is the **ONLY** page on which the student's name and school name will appear. **Form must be typed.**
- ___ Paper is entered in the proper **VJAS** category. Science Fair categories as well as other science competitions and VJAS categories are not identical nor are they interchangeable. Paper must have VJAS forms only.
- ___ Research Statement of Certification signed, if applicable and placed after the Student Entry Form.
- ___ Reader's Form (Page TWO)
- ___ Judge's Form (Page THREE)
- ___ No title page or other identification has been placed behind the above mentioned forms or in the paper itself.
- ___ If a Mentor was used the Certification Form must be signed and placed after the Student Entry Form and the VJAS Mentor Form must be filled out and placed after the Judge's Evaluation Form.
- ___ Continuation Project Form must be filled out if a student is continuing a project and placed after the Judge's Evaluation Form.

**THE FIRST PAGE OF THE TEXT BEGINS WITH THE ABSTRACT
ALL OF TEXT MUST BE WRITTEN IN THE THIRD
PERSON, PAST TENSE (Except for Mathematics, Statistics and
Computer Science which may be written in First Person, Present Tense)**

- ___ Abstract and body of paper (including all parts of the paper) have been typed/word processed in DOUBLE-SPACED format. (Exception: long quotes, figures, legends, within literature citations)
- ___ All margins - top, bottom, and sides are not less than one inch (1") on ALL pages **including appendices.**
- ___ **Number the pages**, beginning with the abstract which is page 1. Put page numbers in the **footer**, which can be within the margin and the only exception to the one inch margin.
- ___ Paper is in no smaller than 12 pt. type size using one of the following fonts: Helvetica, Times New Roman, Courier, or Geneva: OR is typewritten in nothing smaller than 12 characters to the inch. Check it with a ruler!
- ___ **DO NOT USE FOOTNOTES.** Use parenthetical citations (Author, Year).

___ **Abstract** (1 page only): This is the first page of the 12 pages of text.

___ **Introduction**. **Bold** and/or underline the Headings.

___ **Methods and Materials**. Do not list materials - use paragraph format.

___ **Results**. Includes graphs, tables, figures and/or photographs of the summarized data, a written summary of the results, and an analysis of the data.

___ **Discussion and Conclusions**

___ **Literature Cited**: This is not a bibliography. Literature Cited must have a **minimum of three peer-reviewed** citations and each must be cited at least once in the body of the paper. Use APA format, the standard format of the *Virginia Journal of Science* or see the *VJAS Style Manual*.

THIS ENDS THE TEXT WITH A MAXIMUM OF 12 PAGES

___ **Do not include Acknowledgments**, it is no longer permitted.

___ **Appendix**: This is part of the 20-page maximum. A text of 12 pages allows 8 pages for an appendix. If the text is reduced, the appendix may be increased but only to a maximum paper length of 20 pages. **Experimental design diagrams are to be placed in the appendix, if used.**

___ The **“ORIGINAL” and four (4) copies** must be sent. Mark one as the “ORIGINAL” in the center, top of the Student Entry Form (Page ONE) in red. Make copies BEFORE marking the original!!

___ The **“ORIGINAL” and four (4) copies** must have the **school number** at the **TOP, RIGHT SIDE** followed by a **capital “A”** if the author is a senior or a **capital “B”** if the author is an eighth grader. The **code for the category** must be placed in the blank at the **TOP, LEFT** on pages One, Two and Three. The school number is assigned by the VJAS office. These numbers are posted online on the VJAS website (www.vjas.org). If you have any questions do not contact the Director but contact the office by e-mail (vas@smv.org). Do not guess or use any other number your school might have.

___ Send the **"ORIGINAL" and four (4) copies** to the VJAS Office by the deadline. Make at least one additional copy for your files and additional copies for each Special Interest Award or Scholarship for which you plan to apply if your paper is accepted.

___ All copies must have both student and sponsor signatures on them. Each multiple author must fill out a Student Entry Form and have all signatures, but use only one set of Reader and Judge forms.

___ Send paper to the VJAS Office via first class mail, express delivery, or hand deliver. Please do not request a signature. **All papers must be received in the VJAS Office by March 1.**

___ Send VJAS Special Interest Award Applications Form, paper, and any other requested material to the Special Interest Awards Chairperson by the deadline stated on the form. Follow instructions exactly. Do not send any Special Interest Award applications until after paper acceptances have been received, but feel free to prepare them early due to time constraints.

STUDENT PAPER DISQUALIFICATION LIST

A paper **containing even one of the errors or omissions listed below will be disqualified automatically** and returned to the sponsor at the end of the Research Symposium with reason for disqualification. If you are uncertain about a form, it is better to insert it.

1. Absence of any of the cover forms: Student Entry Form (page ONE); Reader's Form (Page TWO); or Judge's Form (Page THREE) or use of OLD forms.
2. Absence of any parts of the paper or paper parts out of order.
3. No STUDENT'S SIGNATURE and/or SPONSOR'S SIGNATURE on the Student Entry Form.
4. No signed STATEMENT OF CERTIFICATION or VJAS MENTOR FORM, or CONTINUATION PROJECT FORM, if required. Forms for other competitions included with paper.
5. Paper placed in a grade level ineligible category or in a non-existing category. (Paper may be disqualified for being placed in the wrong category.)
6. More than four authors per paper.
7. Use of a TITLE page or any other form of identification of the student, sponsor, or school on any page except the Student Entry Form (Page ONE) and Statement of Certification.
8. Single spacing any part of abstract or text. EXCEPTIONS: Long quotes properly indented, tables, figures and legends, and within each Literature Citation.
9. No abstract or abstract exceeding one page. Any other components of the paper missing. (Do not include an Acknowledgements section.)
10. Pages not numbered. (Numbers should be placed in the footer, i.e. in the margin.)
11. Margins (top, side, and bottom) of less than one inch (1") on ANY page, **including** appendix.
12. Print size of LESS THAN 12 point (12 char./in., if typed). Changing font to make paper fit page limit.
13. Computer font OTHER THAN Arial, Helvetica, Times New Roman, Courier, or Geneva.
14. Print illegible or too light to read and reproduce well.
15. Text, from Abstract through Literature Cited, of MORE THAN **12** pages.
16. Entire paper, from Abstract to end of Appendix, of MORE THAN **20** pages.
17. Sending **fewer** than the "**original**" and **four (4) copies** (total of 5 copies) of the paper.
18. Failure to follow any procedures and schedules in the handbook or as specified in official communications.

WHERE SHOULD “CONSUMER SCIENCE” PROJECTS BE ENTERED?

To emphasize the actual scientific principles involved and bring the VJAS categories in line with other competitions, consumer science has been eliminated as a category. Projects of this nature should now be entered in the category that encompasses the scientific principles being investigated.

For Example:

<i>If you are in 7th or 8th grade and your paper was submitted to consumer science in 2011...</i>	<i>...then you would submit your paper in the following middle school category for 2012.</i>
<i>The Effect of Boneless Chicken Breast Size on Final Internal Temperature After Carryover Cooking</i>	<i>Physical Science, Engineering and Mathematics OR Chemical Science</i>
<i>The Effects of Different Multi-Purpose Solutions on the Amount of Bacteria in Petri Dishes</i>	<i>Plant Science and Microbiology</i>
<i>The Effect of Temperature on Number of Un-Popped Kernels</i>	<i>Physical Science, Engineering and Mathematics OR Chemical Science</i>
<i>The Effects of Vitamin Brand Type on the Rate of Dissipation in Stomach Acid</i>	<i>Chemical Science</i>
<i>The Effect of UV Radiation on the Growth of Saccharomyces cerevisiae</i>	<i>Plant Science and Microbiology</i>
<i>The Effect of Musical Key on Song Popularity</i>	<i>Human Behavior</i>
<i>The Effect of Amount of Nitrocellulose on Durability of Nail Polish</i>	<i>Chemical Science</i>
<i>The Effect of Cooking Methods on the Deterioration of Vitamin C in Broccoli</i>	<i>Chemical Science OR Plant Science and Microbiology</i>

<i>If you are in 9th, 10th, 11th, or 12th grade and your paper was submitted to consumer science in 2011...</i>	<i>...then you would submit your paper in the following high school category for 2012.</i>
<i>The Effect of Boneless Chicken Breast Size on Final Internal Temperature After Carryover Cooking</i>	<i>Physics OR Chemistry</i>
<i>The Effects of Different Multi-Purpose Solutions on the Amount of Bacteria in Petri Dishes</i>	<i>Microbiology and Cell Biology</i>
<i>The Effect of Temperature on Number of Un-Popped Kernels</i>	<i>Physics OR Chemistry</i>
<i>The Effects of Vitamin Brand Type on the Rate of Dissipation in Stomach Acid</i>	<i>Chemistry</i>
<i>The Effect of UV Radiation on the Growth of Saccharomyces cerevisiae</i>	<i>Microbiology and Cell Biology</i>
<i>The Effect of Musical Key on Song Popularity</i>	<i>Psychology</i>
<i>The Effect of Amount of Nitrocellulose on Durability of Nail Polish</i>	<i>Chemistry</i>
<i>The Effect of Cooking Methods on the Deterioration of Vitamin C in Broccoli</i>	<i>Chemistry</i>

Student sponsors' should review their students' papers to help make the final category decision. The main topic discussed in the conclusion of the paper should be used to decide in what category the paper should be submitted.

APPENDIX B

Forms:

School Membership Application
Individual Membership Application

Virginia School Regions

**VIRGINIA JUNIOR ACADEMY OF SCIENCE
SCHOOL MEMBERSHIP APPLICATION (2012-13)**

Must be submitted by **January 15**.

Form must be typed (may be typed on screen and then printed).

Note. An individual whose school is not a member of the VJAS may become a member by filling out the Individual Membership form. See the Handbook for details.

1. School Information

- a. Complete School Name _____
- b. School Mailing Address _____
(Street) _____, VA _____
(City) (Zip)
- c. School Phone (____) _____
- d. School System _____ School Region # _____

2. Head Sponsor Information

- a. Name of **Head Sponsor** _____

All VJAS communication will be with the head sponsor ONLY.

The head sponsor is responsible for the dissemination of information to all other sponsors.

- b. E-mail _____
- c. Home Address of Sponsor _____
(Street) _____, VA _____ Tel # (____) _____
(City) (Zip)

- 3. Names and E-mails of Other Sponsors** _____

- 4. Submission Date** _____

School Membership Fee: \$50.00

(Payable to: Virginia Junior Academy of Science)

Federal Tax ID # 54-6038285

(Note. An Entry Fee of \$15 per student will be due with the papers on March 1.)

Mail completed form and check or postal money order for school membership fee as soon as possible to:

**Virginia Junior Academy of Science
c/o Virginia Academy of Science Office
2500 W. Broad Street
Richmond, VA 23220**

NOTE: Check web site (www.vjas.org) periodically for updated VJAS information.

**VIRGINIA JUNIOR ACADEMY OF SCIENCE
INDIVIDUAL MEMBERSHIP APPLICATION (2012-13)**

Must be submitted by **January 15.**

Form must be typed (may be typed on screen and then printed).

Note. See Handbook for the description and criteria of Individual Membership.

1. Name of **Individual** (Student) _____

2. Parent/Guardian Information

a. Name(s) of **Parent/Guardian(s)** _____

b. Parent's Email address _____

c. Home Address (street) _____

(city) _____, VA (zip) _____

d. Home Phone (____) _____

3. School Information

a. Complete School Name _____

b. School System _____ School Region # _____

4. Sponsor Information

a. Name of **Student Sponsor** _____

b. Background (check one) ___ teacher of _____ at _____ school
___ other: describe science background _____

c. E-mail _____

d. Home Address (street) _____

(city) _____, VA (zip) _____ Tel # (____) _____

5. **Submission Date** _____

Individual Membership Fee: \$10.00

(Payable to: Virginia Junior Academy of Science)

Federal Tax ID # 54-6038285

(Note. An Entry Fee of \$15 will be due with each paper on March 1.)

Mail completed form and check or postal money order for membership fee as soon as possible to:

**Virginia Junior Academy of Science
c/o Virginia Academy of Science Office
2500 W. Broad Street
Richmond, VA 23220**

NOTE: Check web site (www.vjas.org) periodically for updated VJAS information.

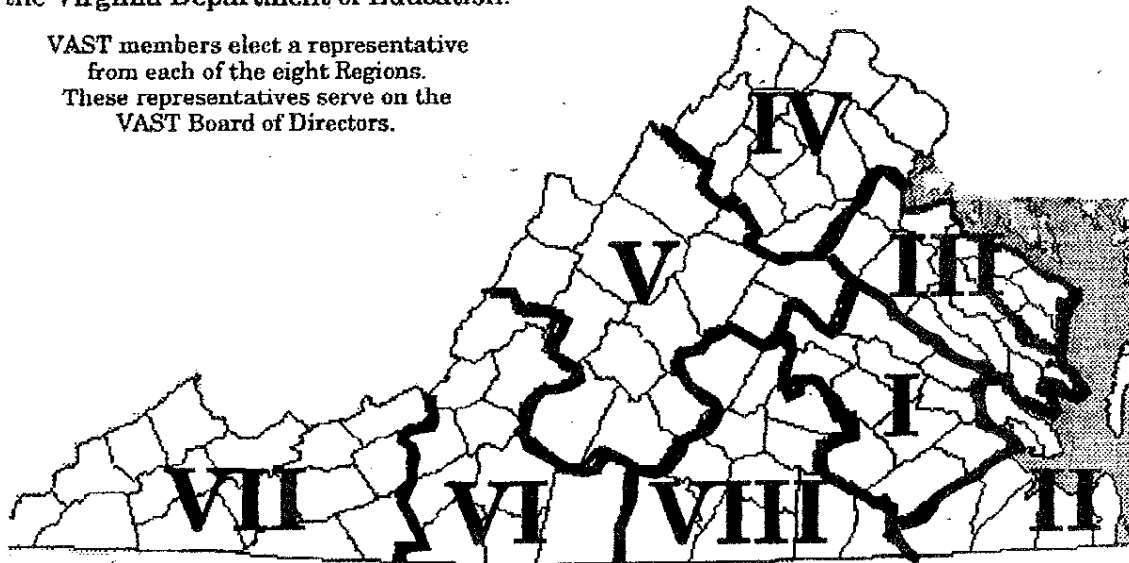
Virginia School Regions

School Districts

Region I	Region II	Region III	Region IV	Region V	Region VI	Region VII	Region VIII
Charles City Co	Accomack Co	Caroline Co	Arlington Co	Albemarle Co	Alleghany I/lands Co	Bland Co	Amelia Co
Chesterfield Co	Isle of Wight Co	Essex Co	Clarke Co	Amherst Co	Botetourt Co	Buchanan Co	Brunswick Co
Dinwiddie Co	Northampton Co	Gloucester Co	Culpeper Co	Appomattox Co	Craig Co	Carroll Co	Buckingham Co
Goochland Co	Southampton Co	King & Queen Co	Fairfax Co	Augusta Co	Floyd Co	Dickenson Co	Charlotte Co
Hanover Co	York Co	King George Co	Fauquier Co	Bedford Co	Franklin Co	Giles Co	Cumberland Co
Henrico Co	Chesapeake	King William Co	Frederick Co	Campbell Co	Henry Co	Grayson Co	Greensville Co - Emporia
New Kent Co	Franklin	Lancaster Co	Loudoun Co	Pluvanna Co	Montgomery Co	Lee Co	Halifax Co - South Boston
Powhatan Co	Hampton	Mathews Co	Madison Co	Greene Co	Patrick Co	Pulaski Co	Lunenburg Co
Prince George Co	Newport News	Middlesex Co	Orange Co	Highland Co	Pittsylvania Co	Russell Co	Mecklenburg Co
Surry Co	Norfolk	Northumberland Co	Page Co	Louisa Co	Roanoke Co	Scott Co	Mottoway Co
Sussex Co	Poquoson	Richmond Co	Prince William Co	Nelson Co	Covington	Smyth Co	Prince Edward Co
Colonial Heights	Portsmouth	Spotsylvania Co	Rappahannock Co	Rockbridge Co	Danville	Tazewell Co	
Hopewell	Suffolk	Stafford Co	Shenandoah Co	Rockingham Co	Martinsville	Washington Co	
Petersburg	Virginia Beach	Weastmoreland Co	Warren Co	Bedford	Rosnoke	Wise Co	
Richmond (city)	Williamsburg / James City Co	Fredericksburg	Alexandria	Bauna Vista	Salem	Wythe Co	
		Colonial Beach	Fairfax	Charlottesville		Bristol	
		West Point	Falls Church	Harrisonburg		Galax	
			Manassas	Lexington		Norton	
			Manassas Park	Lynchburg		Radford	
			Winchester	Staunton			
				Waynesboro			

These eight regions have been established by the Virginia Department of Education.

VAST members elect a representative from each of the eight Regions. These representatives serve on the VAST Board of Directors.



APPENDIX C

FORMS FOR PAPER SUBMISSION

Student Entry Form

Certification Statement Form

Reader's Evaluation Form

Judge's Evaluation Form

Continuation Project Form

VJAS Mentor Form

Instructions for School & Individual Entry Forms
(These are Excel Spreadsheets and the files must be downloaded.)

Category Code: (MS=2 letters, HS=3 letters)
Multiple Author Paper Check Here _____

VJAS School Number _____

**2013 STUDENT ENTRY FORM
PAGE ONE**

Each **student** (multiple authors included) must fill out this form completely and sign it. TYPE all information. This can be done on screen. Make sure all information prints. Staple pages ONE, TWO, and THREE to **each** copy of your paper. Signing this entry form indicates understanding and acceptance of the official VJAS rules as set forth in the latest edition of the VJAS Handbook. Entries must be received in the VJAS office by **March 1**. USE FIRST CLASS MAIL, EXPRESS MAIL, or HAND DELIVER. (Rubber band all copies together.)

1. **Student's Name** _____ **Grade** _____
(First) (Middle) (Last)

Home Address _____ City _____

Email _____, VA Zip _____

Telephone (____) _____ Parent's Name _____

2. **Name of Student Sponsor** _____ E-mail _____

3. **Complete School Name** _____

School Address _____

City _____, VA Zip _____

School System _____ Tel # (____) _____

4. **Title of Paper** _____

If paper is a **continued project** then state second, third, etc. year of study. _____

5. **Category** in which paper belongs. (**Carefully circle only one and place the code at upper left.**)

<i>MS: Grades 7-8 ONLY</i>	<i>HS: Grades 9-12 ONLY</i>	<i>HS: Grades 9-12 ONLY</i>
AH - Animal & Human Sciences	ABG - Animal Behavior & Genetics	MDH - Medicine & Health
CS - Chemical Science	BOT - Botany	MCB - Microbiology & Cell Biology
EE - Ecology & Earth Sciences	CHM - Chemistry	PHY - Physics
HB - Human Behavior	EGR - Engineering	PSY - Psychology
PE - Physical Science, Engineering & Math	ENV - Environmental Science	ZOO - Zoology
PM - Plant Science & Microbiology	MSC - Math, Statistics & Computer Science	

6. I _____ **DID** _____ **DID NOT** use living vertebrates, humans, recombinant DNA, tissue, pathogenic agents, controlled or toxic substances, or a mentor. If you **DID**, then have your sponsor sign the Certification Statement Form and here. _____ Student Sponsor Signature*

7. How many times previously have you presented at VJAS meetings? _____

8. If my paper is accepted, I agree to present my paper on May 22, 2013.

Student's Signature* _____ Date _____

9. This paper has been reviewed and is recommended for reading:

Student Sponsor's Signature* _____ Date _____

(*Failure to have both student and student sponsor signatures will disqualify paper.)

SEND TO:

**Virginia Junior Academy of Science
2500 W. Broad Street, Richmond, VA 23220**

CERTIFICATION STATEMENT FORM

VERTEBRATE ANIMAL CERTIFICATION

I certify that the use of live vertebrates in the experimentation and observations covered by this paper was in accordance with the rules for the use of live vertebrates contained in the latest edition of the VJAS Handbook

SIGNED: _____
Student _____ Date _____

Student Sponsor _____ Date _____

HUMAN SUBJECT CERTIFICATION

I certify that the use of human subjects in the experimentation and observations covered by this paper was in accordance with the State of Virginia Regulations of the Board of Education Regarding Research involving Students and the rules for the use of humans contained in the latest edition of the VJAS Handbook.

SIGNED: _____
Student _____ Date _____

Student Sponsor _____ Date _____

RECOMBINANT DNA CERTIFICATION

I certify that the use of recombinant DNA in the experiment and observations covered by this paper was in accordance with the revised NIH Guidelines for Research Involving Recombinant DNA Molecules and the rules for recombinant DNA contained in the latest edition of the VJAS Handbook.

SIGNED: _____
Student _____ Date _____

Student Sponsor _____ Date _____

CELL AND TISSUE CERTIFICATION

I certify that the use of cell or tissue samples in the experimentation and observations covered by this paper was in accordance with the rules contained in the latest edition of the VJAS Handbook.

SIGNED: _____
Student _____ Date _____

Student Sponsor _____ Date _____

PATHOGENIC AGENTS TOXIC OR CONTROLLED SUBSTANCES CERTIFICATION

I certify that the use of pathogenic agents, toxic or controlled substances in the experimentation and observations covered in this paper was in accordance with the rules for pathogenic agents, toxic or controlled substances contained in the latest edition of the VJAS Handbook.

SIGNED: _____
Student _____ Date _____

Student Sponsor _____ Date _____

MENTOR CERTIFICATION

This is to certify that the student worked in a research facility or received significant help from a professional other than the student's teacher. For further information, see the VJAS Mentor Form. **The VJAS Mentor Form must be filled out by the mentor in addition to the sponsor signing this Mentor Certification Statement.**

SIGNED: _____
Student _____ Date _____

Student Sponsor _____ Date _____

2013 READER'S EVALUATION

Category Code

PAGE TWO

VJAS School Number

(MS=2 letters, HS=3 letters)

Title of Paper (Typed by student)

STUDENT - do not write below this line

READER - Please complete all parts of this part of the evaluation

CRITERIA FOR SCREENING VJAS PAPERS

Do Not Write on the Research Paper – Please put constructive comments below or on the reverse.

- _____ A. **Abstract (10 points maximum)** - Concise statements of the research objective, approach, key results, and conclusions.
- _____ B. **Introduction (20 points maximum)** - Understanding and explanation of background concepts, literature review and literature cited. Rationale/reasons for conducting experiment; purpose of experiment, testable hypothesis.
- _____ C. **Project Design (10 points maximum)** - Manipulated/independent variables, levels of independent variable, control group, repeated trials, responding/dependent variable, constants.
For Math. This includes the logical development of ideas, validity of proofs and conjectures.
- _____ D. **Methods and Materials (10 points maximum)** - Clear explanation of procedure: all materials and equipment included, precise, and replicable; with appropriate safety.
- _____ E. **Results: Data Presentation and Analysis (15 points maximum)** - Data should be summarized and presented verbally as well as numerically (tables) or pictorially (graphs). Appropriate use methods of analysis of these data should be presented, such as measures of central tendency, measures of dispersion/variation and/or other statistical analysis.
- _____ F. **Discussion and Conclusions (15 point maximum)** - Includes major findings; explanation of findings; discusses support or lack of support for hypothesis; comparisons with other research referenced in literature cited; improvements/suggestions for other research.
- _____ G. **Creativity, Appropriateness, Scientific Validity (10 points maximum)** – Creativity in approach to problem selected, independent thinking, appropriateness as indicated by student's understanding of problem; scientific validity of student's work
- _____ H. **General Assessment of Paper (10 points maximum)** – Understanding of problem; quality of written paper: grammar and spelling; effort.

_____ **TOTAL SCORE (A+B+C+D+E+F+G+H+I = 100 possible points)** *Please double check calculations.*

2013 JUDGE'S EVALUATION

Category Code

(MS=2 letters, HS=3 letters)

PAGE THREE

Title of Paper (Typed by student)

VJAS School Number

Judge: Please complete all parts of the "Criteria for Written Papers" before student sessions; pencil is preferable. Bring these forms and the papers with you to the meeting. Specific criterion items and scores are included for your guidance and may not be applicable to all papers. Please use your own judgment in allocating points within major categories (A, B, etc.) if the suggested scoring is deemed inappropriate to a particular paper. Please write comments to the students on the paper or on the back of this form. All forms and papers will be returned to the student. Please double check all calculations.

CRITERIA FOR JUDGING VJAS WRITTEN PAPERS (100 Points maximum)

- _____ **A. Abstract (10 points maximum)** - Concise statements of the research objective, approach, key results, and conclusions.
- _____ **B. Introduction (20 points maximum)** - Understanding and explanation of background concepts, literature review and literature cited. Rationale/reasons for conducting experiment; purpose of experiment, testable hypothesis.
- _____ **C. Project Design (10 points maximum)** - Manipulated/independent variables, levels of independent variable, control group, repeated trials, responding/dependent variable, constants.
For Math. This includes the logical development of ideas, validity of proofs and conjectures.
- _____ **D. Methods and Materials (10 points maximum)** - Clear explanation of procedure: all materials and equipment included, precise, and replicable; with appropriate safety.
- _____ **E. Results: Data Presentation and Analysis (15 points maximum)** - Data should be summarized and presented verbally as well as numerically (tables) or pictorially (graphs). Appropriate use methods of analysis of these data should be presented, such as measures of central tendency, measures of dispersion/variation and/or other statistical analysis.
- _____ **F. Discussion and Conclusions (15 point maximum)** - Includes major findings; explanation of findings; discusses support or lack of support for hypothesis; comparisons with other research referenced in literature cited; improvements/suggestions for other research.
- _____ **G. Creativity, Appropriateness, Scientific Validity (10 points maximum)** – Creativity in approach to problem selected, independent thinking, appropriateness as indicated by student's understanding of problem; scientific validity of student's work
- _____ **H. General Assessment of Paper (10 points maximum)** – Understanding of problem; quality of written paper: grammar and spelling; effort.

PAPER TOTAL SCORE (100 possible points) A+B+C+D+E+F+G+H+I = _____

ORAL PRESENTATION (50 Points maximum)

- _____ **A.** The oral presentation is clear, practiced, and presented within the ten minute time allotted. The student is comfortable with the use of technology and principles of public speaking in the presentation of a scientific paper. **(Maximum 10 points)**
- _____ **B.** The oral presentation is comprehensive. The student states objectives, outlines methodology, reviews results, and summarizes conclusions. **(Maximum 10 points)**
- _____ **C.** The student presentation and responses to judges' questions show clear understanding of the research. **(Maximum 30 points)**

ORAL TOTAL SCORE (50 possible points) A + B + C = _____

GRAND TOTAL (150 Possible points) Paper + Oral Presentation _____

Please double check all calculations.

Continuation Project Form

IF this project has been submitted to the VJAS in a previous year, all aspects of this form MUST be completed and included with the other entry forms. This form should be located behind the Judges Form.

Title of Project:

How many times have you entered a project under a similar research topic? _____

How does the current year's project document new and different research?

List the titles and year of your past research papers:

- 1.
- 2.
- 3.
- 4.

VJAS Mentor Form

This form must be completed by the scientist supervising the student research conducted in a research institution (e.g., universities, medical centers, NIH, correctional facilities, etc.) or industrial setting.

This form **MUST** be attached to your paper submission and placed after the Judge Evaluation Form.

Paper Title _____

To be completed by the Scientist (NOT the Student or Student Sponsor) after experimentation has been completed. Please **DO NOT** identify student by name.

The student conducted research at my institution: (check one)

- A. Only to use the equipment B. To perform experiment(s)

If B is checked, the following questions must be answered.

- 1) How did the student get the idea for her/his project? (e.g. Was the project assigned, picked from a list, an original student idea, etc.?)
- 2) What did the student do that showed creativity and ingenuity? (Did the student create or show creativity in experimental design, development of techniques or equipment, arrive at own conclusions, etc.)
- 3) Did the student work on the project as a part of a research group? Yes No
If yes, how large was the group and what kind of research group was it (students, group of adult researchers, etc.)
- 4) What specific procedures did the student actually perform? How independently did the student work? Please list and describe. (Do not list procedures student only observed.)

Scientist's Printed Name _____

Signature _____ Title _____

Institution _____ Date Signed _____



Address _____ Phone (____) _____

_____ e-Mail _____

2013 School & Individual Entry Forms Instructions

A **School Entry Form** or **Individual Entry Form** must be completed when submitting papers for the Research Symposium. These entry forms are Excel Spreadsheets and the appropriate Excel File must be downloaded by clicking on the proper link below.

Click here for

- School Entry Form (for Member Schools). 
- Individual Entry Form (for Individual Members). 

Directions. This form is for the Head Sponsor (Member Schools) or Parent/Guardian (Individual Members or Non-Members) to complete.

1. After clicking on the link above, download the file and complete the Excel spreadsheet.
2. Please name the file “name_entry_form” using the school name or last name (individual). (Examples: “WakefieldHS_Entry_Form” or “Smith_Entry_Form”)
3. Please make a hard (paper) copy and enclose it with your student paper(s), and
4. Email a copy of the completed Excel file to the VJAS Office at: vas@smv.org.

Importance. These forms are used to generate the VJAS Program. The material, as you submit it, is copied and pasted into our other forms, including the Program. All of the information should be accurate; and in particular, please make sure of the following:

1. The full name of the student is given and is the same as listed on the Student Entry Form attached to the paper. Make sure that the spelling is correct and do not use nicknames.
2. The exact title of the paper is given and is the same as listed on the Student Entry Form attached to the paper. Make sure that the spelling is correct.

APPENDIX D

SPECIAL FORMS
& Related Guidelines

Phil Robinson Research Grant Application

Phil Robinson Research Grant Guidelines

Special Interest Award Application

Scholarship Application

Application for Junior Officers

Election Procedure for VJAS Officers

PHIL ROBINSON RESEARCH GRANT APPLICATION

Deadline: Must be received by the VJAS Director by **December 1.**

1. Name: _____ Grade: _____
(First) (Middle) (Last)
2. Address: _____, VA _____
(Street) (City) (Zip)
3. Student Sponsor: _____ Tel. No. _____
email: _____
4. Project Advisor _____
(If different from Student Sponsor)
5. School: _____
6. Title of Research: _____

7. On an attached sheet, enclose a project description* which describes the following:

Purpose of research
Procedure for testing hypothesis or a description of experimental design
Itemized list of all **SUPPLIES** to be purchased with grant funds and the approximate cost of each item. Remember, **equipment cannot be purchased** with grant funds.

8. Total Amount Requested: \$ _____

9. ENCLOSE STATEMENT FROM SPONSOR* SUPPORTING PROJECT.

(Sponsor: Please verify the feasibility of the project for this student in the setting in which it is to be accomplished.) Each grant application must have a support letter.

***Note:** Before mailing your application, assure that your project description and the statement of your sponsor are enclosed.

Any student who applies for research funds must join the VJAS and submit a paper. Any student who receives research funds and whose paper is accepted is committed to attend and present his/her paper at the annual meeting. Anyone who does not is in violation of the fund and monies received by that student must be returned to the Phil Robinson Endowment Fund.

10. Student's Signature: _____

11. Student Sponsor's Signature: _____

STUDENT: Do not write below this line

For use of the Phil Robinson Research Committee

_____ Approved Date: _____
_____ Disapproved Date: _____

Amount: \$ _____

Send to:
Susan Booth, Director
134 Twin Lakes Circle
Newport News, VA 23608

Guide Lines for the Phil Robinson Research Grant Application

These suggestions are in addition to those instructions that appear on the grant application form. Also see “Conducting Research” #7 in the Handbook for further Guidelines for these Grants.

1. The supporting information for a grant should be limited to two pages (not counting the application form). It should include the title of the research, a brief statement regarding the purpose of the research, a brief statement regarding how the research is to be carried out, and a list of materials needed with prices and sources of these materials.
2. Where multiple grant requests are from one school, the pooling of materials should be considered. When five people are working with Wisconsin fast plants, each person does not need a pound of seed.
3. When considering the request, consider substituting less expensive equipment for the scientific form. If the research is to follow a published research project that used beakers, consider Mason jars instead of the much more expensive beakers. Consider various sizes of Ziploc bags, Gladware containers, etc.
4. Consider other than purchased sources for materials. Soil can come from many sources other than from a scientific supply house.
5. The following is a list of items that will not be funded:
 - a. film & developing
 - b. presentation materials
 - c. travel
 - d. items that should be present at the school such as Petri dishes, standard glassware, standard chemicals, computer supplies, and paper products
 - e. items that are excessively expensive which is anything over \$250.00
 - f. food items such as soft drinks, meals, etc.

SPECIAL INTEREST AWARD APPLICATION
Submit after notification of acceptance
A COPY OF YOUR RESEARCH PAPER MUST ACCOMPANY THIS FORM

1. Title of Paper _____
2. VJAS Category _____
3. Name _____ Grade _____
4. Home Address (Street) _____
(City) _____ VA _____ Tel. No. _____
(Zip)
5. School Name _____
6. School Address _____ (City) _____, VA _____
(Zip)
7. Student's Signature _____
8. Student's e-mail _____
9. Parent/Guardian's Signature _____
10. Student Sponsor: Name _____ Signature _____
11. Student Sponsor's e-mail _____
12. Head Sponsor: Name _____ Signature _____
13. Head Sponsor's e-mail _____

These signatures indicate verification of the accuracy of the information provided and endorse the application for the award selected.

14. Please circle one award for which this application is made

Cancer Research Award

Speleological Society Award

Dr. & Mrs. Leake Chemistry Award

VA Museum of Natural History Award

Infectious Disease Award

VA Sea Grant College Program Award

Gamma Sigma Delta Award

NOTE: If you are applying for more than one you must submit separate applications and papers.

15. Send by Certified Mail (*do not request a signature*) all completed application packages to the VJAS Special Interest Awards and Scholarship Chair.

Susan Booth, Director
134 Twin Lake Circle
Newport News, VA 23608

Deadline for Receipt: All packages MUST BE RECEIVED by APRIL 25.

SCHOLARSHIP APPLICATION
Submit after notification of acceptance
A COPY OF YOUR RESEARCH PAPER MUST ACCOMPANY THIS FORM
(SEND FIVE [5] COPIES FOR THE LEWIS AND MACKENZIE SCHOLARSHIPS)

1. Title of Paper _____
2. VJAS Category _____
3. Name _____ Grade _____
4. Home Address (*Street*) _____
(*City*) _____ VA _____ Tel. No. _____
(*Zip*) _____
5. School Name _____
6. School Address _____ (*City*) _____, VA _____
(*Zip*) _____
7. Student's Signature _____
8. Student's e-mail _____
9. Parent/Guardian's Signature _____
10. Student Sponsor: Name _____ Signature _____
11. Student Sponsor's e-mail _____
12. Head Sponsor: Name _____ Signature _____
13. Head Sponsor's e-mail _____

These signatures indicate verification of the accuracy of the information provided and endorse the application for the award selected.

14. Please circle one scholarship for which this application is made

Frances and Sydney Lewis Scholarship

Bethel Scholarship

Henry W. MacKenzie Jr. Scholarship

College Scholarship: _____

(One college per application. See Handbook for list. College selects awardee.)

NOTE: If you are applying for more than one you must submit separate (and complete) applications.

15. Send by Certified Mail (*do not request a signature*) all completed application packages to the VJAS Special Interest Awards and Scholarship Chair.

Susan Booth, Director
134 Twin Lake Circle
Newport News, VA 23608

Deadline for Receipt: All packages MUST BE RECEIVED by APRIL 25.

Virginia Junior Academy of Science Application for Junior Officers
(Please Type or Print)

Name _____ Phone # (____) _____ Grade _____

Address _____ VA Zip _____
(Street) (City)

e-mail _____

School _____

Officer Sponsor _____

e-mail _____

Desired Office: President _____ Vice President _____ Secretary _____
Regional Director _____ Region # _____

The following questions are to be answered in the space provided. **Answers are not to exceed the front of this sheet of paper.** Please attach the two minute speech you plan to make in front of the Academy in running for this office.

1. What other leadership experience have you had? Include the length of any office(s) and any awards won in association with that office.

2. If elected to office, what changes or improvements would you suggest for the VJAS?

3. If you had to tell the voters one reason why you are the best candidate for office, what would that one reason be?

Candidates Signature Date Parent's Signature Date

▪ In signing, I agree to support this student in their role as an officer if elected and serve as a member of the VJAS committee for that year.

Officer Sponsor's Signature Date

▪ I hereby recommend the above student as a candidate for office in VJAS and support both the student and sponsor in their roles.

Principal's Signature Date

Susan Booth, Director
134 Twin Lake Circle
Newport News, VA 23608

Completed applications must be received by April 25. Send to:

ELECTION PROCEDURE
Virginia Junior Academy of Science Officers

1. All candidates for office in the VJAS must complete the “Application for Junior Officers” and compose and include a copy of the intended candidacy speech. Please TYPE or PRINT in black ink, and send to the VJAS Director so that it is received by **APRIL 25**; please do not request a signature. (See application for name and address.)
2. Be sure the Application has the following signatures: candidate acknowledgment, parent support, sponsor approval, and principal support. Any applications without the required signatures will not be eligible for acceptance. (One candidate per school please.)
3. All candidates are required to attend the VJAS Committee Meeting before the General Session; see Program for exact time and location. Candidates will deliver their speeches and have the opportunity to meet with the presiding VJAS officers to learn more about each position. Failure to be present at the Committee Meeting will result in the removal of the candidate from the ballot. (Reminder: Candidates must be dressed in business casual attire at ALL times and if not then can be removed from the election process at any time.)
4. Candidates will attend the General Sessions with their school. At the appropriate time, candidates for each of the offices will be called on stage in turn. **THERE WILL BE NO FLOOR NOMINATIONS AT THE GENERAL SESSION.**
5. To introduce each of the candidates, the presiding officers will present the candidates. **THERE WILL BE NO NOMINATING SPEECHES.**
6. Each Candidate will have no more than two (2) minutes to address the General Session. Candidates will be cut off if the speech runs over.
7. Each dues paying school in attendance will have one vote for each office. Ballots will be distributed to sponsors before the Jeffers Lecture, and collected following the conclusion of that general session. Any ballots received after this time will not be tallied.
8. Results of the election will be announced at the Awards General Session.
9. Expectations: VJAS officers are required to attend the summer meeting, winter meeting and Research Symposium, including the Annual Meeting.
10. The Office of President candidate must be a current officer or one that has participated in the meetings prior to the year of taking office.