# **2024 Summer Residential Governor’s School (SRGS) Mathematics, Science, and Technology Application Information Page**

 

**THIS PAGE DOES NOT NEED TO BE INCLUDED WITH YOUR APPLICATION**

The theme of the Summer Residential Governor's School for Mathematics, Science, and Technology (MST) is a quotation from Marie Curie: "Nothing in life is to be feared. It is only to be understood." Accordingly, the program challenges each student to learn a substantial amount about a particular area in mathematics, science, and/or technology at the same time that the curriculum illustrates the ever-increasing interdisciplinary nature of modern science, mathematics, and engineering. In addition to hands-on laboratory and multimedia-based instruction in content areas outlined by courses, students are exposed to a series of interdisciplinary questions pertaining to the nature of science, the design of scientific experiments, the respective roles of logic and mathematics in science, and public-policy aspects of science and technology. Finally, students observe the interplay between experimentation, imagination, and logic.

**Students must type in the data on the first page of this application for clarity and accuracy.**

For division information, please contact the gifted education coordinator whose contact information is available on the [Virginia Department of Education Website](https://www.doe.virginia.gov/).

The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, sexual orientation, gender identity, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following position has been designated to handle inquiries regarding the Department’s nondiscrimination policies: Deputy Superintendent – Finance and Operations, Virginia Department of Education, P.O. Box 2120, Richmond, Virginia 23218-2120, (804) 225-2025.

For further information on Federal nondiscrimination regulations, contact the Office of Civil Rights at [OCR.DC@ed.gov](mailto:OCR.DC@ed.gov) or call 1 (800) 421-3481.

You may also view Executive Order 1 (2014), which specifically prohibits discrimination on the basis of race, sex, color, national origin, religion, sexual orientation, gender identity, age, political affiliation, or against otherwise qualified persons with disabilities. The policy permits appropriate employment preferences for veterans and specifically prohibits discrimination against veterans. You may obtain additional information at the Commonwealth of Virginia’s [official website](http://www.virginia.gov/) concerning this equal opportunity policy.

## 2024 SUMMER RESIDENTIAL Governor's SCHOOL (SRGS) math, science, & technology Application

**APPLICANTS MUST TYPE THIS PAGE FOR CLARITY AND ACCURACY.**

**I attend**  Public School  Private School  Home School

Applicant Information: Complete all requested information

| **Item** | **Personal Information** | No Data | No Data |
| --- | --- | --- | --- |
| First Name |  | Date of Birth |  |
| Middle Name |  | Nickname |  |
| Last Name |  | Graduation Year |  |
| Mailing Address |  | No Data |  |
| City |  | Virginia ZIP |  |
| Home Telephone |  | Student’s Email  **(NOT school email)** |  |
| Parent’s/Guardian’s Work Phone |  | Parent’s/Guardian’s Email |  |
| Parent’s/Guardian’s Work Phone |  | Parent’s/Guardian’s Email |  |

**High School Information: Complete all requested information.**

| **Item** | **Personal Information** |
| --- | --- |
| High School | Unity Reed High School |
| School Address | **8820 Rixlew Lane** |
| City/State/ZIP | Manassas, VA 20109 |
| Telephone | **703.365.2900** |
| Fax Number | 703.330.1233 |
| HS Contact Name and Email | **Nathan Caddock craddona@pwcs.edu** |
| **Public School Students Only** | **No Data** |
| Division Name | Prince William County Public Schools |

**Student Statement:**

The decision to apply for Governor's School is my own. I want to participate fully in the program. If selected, I will abide by the rules and expectations explained in the program handbook and all other expectations provided by the program director. The responses contained in this application are my own work and are truthfully offered.

**SIGNATURE OF APPLICANT DATE**

**For Official Use Only by Gifted Education Coordinator: Indicate student's score and rank.**

**Score (from page 8) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Rank\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**(round to the nearest hundredth)**

| Applicant's Full Name |  |
| --- | --- |

**ALL APPLICANTS MUST COMPLETE INFORMATION ON THIS PAGE**

### Career Highlights: Activities, RESEARCH, and Honors

*In the three sections that follow, list accomplishments that highlight your positions of leadership or intellectual activities. Higher scores will be awarded to activities/programs in which you hold a position of leadership and to research, study, presentations, and competitions associated with extracurricular clubs, community groups, national organizations, etc.*

**Activities/Programs**

List the three most significant activities/programs in which you have participated **during the past three years** **that relate to your area of interest.** Include the name of the organization, sponsoring agency, or group. Also, describe the time involved and any leadership position you have held. Under “Year”, indicate the calendar year of the training or activity. If you need more space, attach a second sheet. Please explain any acronyms that you use.

| Activity and Organization | Position Held | Time Involved | Year |
| --- | --- | --- | --- |
| *Example: Robotics Club* | *Vice President* | *4 hours/month* | *2021-22* |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Research/Study Experiences**

List the three most significant research/study experiences you have had **in the past three years that relate to your area of interest**. Make sure you include the name of any group, organization, or individual with whom you studied. If you need more space, attach a second sheet.

| Study/Brief Description | Teacher | Organization | Time |
| --- | --- | --- | --- |
| *Example: Tidewater Regional Science Fair project: Water Purification Methods for e.coli Removal* | *Danny Peters, Biology* | *Poquoson High School* | *2 semesters,*  *2022-23* |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Honors/Recognitions

| Honor/Recognition | Level of Competition – Regional, State, National, International | Year |
| --- | --- | --- |
| *Example: Induction into the National Honor Society, serving as Secretary* | *Regional* | *2022* |
|  |  |  |
|  |  |  |
|  |  |  |

In this section, please list the three **most significant honors/recognitions you have received during the last three years in your area of interest**.

| Applicant's Full Name |  |
| --- | --- |

**ALL APPLICANTS MUST COMPLETE INFORMATION ON THIS PAGE**

**THIS PAGE DOESN’T NEED TO BE INCLUDED WITH YOUR APPLICATION (Include the essay instead)**

### Academic Essay

Students must respond to one of the essay topics indicated below. The essay should be 300-500 words (approximately two pages of double-spaced 12-point type, with a 1” margin on each side). Include your name in the upper right-hand corner of each page of the essay. Sources should be cited at the conclusion of the essay. Students are asked to number the pages 3a and 3b and place them in the final academic application after this page. Students should review the rubric at the bottom of this page and consider each of the areas carefully as they proofread and edit their essays. Students may seek advice from appropriate teachers as they draft and revise their essays. Your essay will be reviewed for its central idea, logic, elaboration, organization, unity, and voice; similarly, the essay will be reviewed for its adherence to grammatical conventions in sentence structure, usage, and mechanics.

**Essay Topics**

Math/Science/Technology (MST) students must respond to one of the following two prompts:

1. Technically called "unmanned aerial vehicles" (UAVs), drones are just aircraft without human pilots onboard, encompassing everything from military reconnaissance vehicles to unmanned crop dusters on farms. Hobbyists, entrepreneurs, and businesses are finding new ways to use drones. Still, drone technology continues to raise questions about air safety, privacy, and security. In your opinion, should drones be available to everyone or should the federal government restrict the sale and use of drones? State your position and support it with specific reasons and examples.

2. Depending on their intensity, fires can benefit or harm forests. Without natural fire, dead vegetation builds up to levels high enough that eventually a fire would burn through with unnaturally high intensity that would seriously harm the forest ecosystem. Some wildlife populations often suffer substantial losses in the months following a fire due to a loss of food sources. Yet, fires help in the reproductive success of some plants, the control diseases and insects, and to recycle nutrients into the soil. Certainly, damage to property and homes is also a concern. The U.S. Forest Service spends millions of dollars trying to prevent large devastating wildfires by thinning the forests and setting smaller fires. These are called controlled or prescribed burns. But new research suggests a different solution -- just leave the forests alone. State your position and support it with specific reasons and examples.

**Scoring Rubric**

| **Composition** | **0 – 1** | **2** | **3** | **4** |
| --- | --- | --- | --- | --- |
| Central Idea/Position | Missing | Unclear | Weak | Strong |
| Evidence/Details | Unclear | Minimal | Adequate | Precise/Relevant |
| Organization/Unity | Lacking | Random/Many digressions | Lapses/ Some digressions | Logical/Unified |
| Counter Claims | Absent | Weak | Attempted | Effective |
| Word Choice | Lacking | Limited | Some Specificity | Highly Specific |
| **MECHANICS** | **0** | **1** | **2** | No Data |
| Sentence Structure | Weak | Some variety | Varied | No Data |
| Usage | Incorrect | Some incorrect | Consistently correct | No Data |
| Mechanics | Incorrect | Some incorrect | Consistently correct | No Data |

| Applicant's Full Name |  |
| --- | --- |

**ALL APPLICANTS AND PARENT/GUARDIAN MUST COMPLETE INFORMATION ON THIS PAGE**

### Applicant and Parent/Guardian Assurances

I, the parent/guardian of , permit my son/daughter, if selected, to participate in the 2024 Summer Residential Governor's School. I realize that transportation to and from the Governor's School and spending money for personal expenses must be provided by the participants. I understand that if selected for the program, he/she must abide by the rules and expectations set forth for the school. I further agree that I have been duly informed that **LEAVES OF ABSENCE** from these programs are allowed only for **SEVERE CASES OF MEDICAL AND/OR FAMILY EMERGENCIES**. Medical and family emergencies include major illness, hospitalization, or death of an immediate family member or guardian. I also understand that failure to participate in the programs, or unwillingness to abide by the rules and expectations, may be just cause for immediate dismissal.

**SIGNATURE OF PARENT/GUARDIAN DATE**

Both student and parent/guardian must initial after having read the following assurances. These constitute the expectations for students who apply or accept invitations to the summer residential governor's school program.

| Student  Initials | Parent or  Guardian  Initials | Assurances |
| --- | --- | --- |
| No Data | No Data | I understand that leaves of absence are granted ONLY in the case of medical or family emergencies as described above. Participants are expected to arrive at the site by the opening ceremony, indicated in the *2024 Student and Parent Guide for Governor's Schools*, and remain at the site through the closing ceremony. |
| No Data | No Data | I understand that the programs require concerted academic focus, preparation, and motivation from all participants and that participants are expected to demonstrate the emotional maturity and self-discipline to participate in the activities and to demonstrate respect for self, others, program, and school. |
| No Data | No Data | I understand that participants will be expected to follow the rules and expectations outlined in the *2024 Student and Parent Guide for Governor's Schools*, and any other instructions provided by the program director. These rules and expectations have been thoroughly read and are understood. |
| No Data | No Data | I understand that each nominee and division gifted education coordinator/private school regional coordinator will be mailed acceptance and alternate information by mid-April 2024, and that no information will be available before that date. |
| No Data | No Data | I understand that possession of tobacco or alcohol, weapons, or nonprescription drugs will result in the participant's immediate dismissal from the program and that participants are also subject to any disciplinary action that the sponsoring school division or private school chooses to invoke. Certain infractions may also result in legal consequences as outlined in the *Code of Virginia*. |
| No Data | No Data | I understand that previous participants of any Summer Residential Governor's School program (including Governor's Foreign Language Academies) shall not apply for or participate in the Summer Residential Governor's School program; and I am not applying for a 2024 Governor's Foreign Language Academy or for another Summer Residential Governor’s School. |
| No Data | No Data | I certify that I am a resident of the Commonwealth of Virginia and eligible for a free, public education in the Commonwealth. |
| No Data | No Data | **I understand failure to provide complete and accurate medical, mental health, and prescription information may result in immediate dismissal from the program.** |
| No Data | No Data | I understand that I waive my rights to review and inspect my child’s application and score sheet for the Summer Residential Governor’s School program. |
| No Data | No Data | I certify that these are my truthful responses to these assurances. |

| Applicant's Full Name |  |
| --- | --- |

**INFORMATION ON THIS PAGE MUST BE COMPLETED BY THE APPROPRIATE CONTENT AREA TEACHER**

### Teacher Recommendation A

This recommendation must be completed by a teacher in the student's area of interest who can assess his/her current abilities, preferably a teacher who has taught the student in a course closely related to the selected program. There are two required parts to the recommendation: a rating scale and a narrative.

Rating Scale Teacher A

1. What course or program of studies has the student taken under your supervision? In what year(s)?

1. Please estimate the extent to which the student has demonstrated in your class(es) the qualities listed below. Use the scale from 0-2 as indicated. Be sure to respond to all qualities; items omitted are included as a zero when computing a score. Please use only whole number values.

**0=Good (Above Average) 1=Excellent (Top 10 Percent) 2=Outstanding (Top 2-3 Percent)**

| No Data | **Quality** | **Score** |
| --- | --- | --- |
|  | Motivation and initiative | No Data |
|  | Self-direction | No Data |
|  | Intellectual curiosity | No Data |
|  | Independence of thought | No Data |
|  | Originality of ideas | No Data |
|  | Use of higher-level thinking skills | No Data |
|  | Attitude toward learning | No Data |
|  | Ability to contribute to a group process | No Data |
|  | Willingness to accept ideas of others | No Data |
|  | Emotional stability, maturity, and self-discipline | No Data |
|  | Openness to new experiences | No Data |
|  | Cooperative behavior | No Data |
|  | Respect and tolerance for the views of others | No Data |
| Noata | **Subtotal A (out of 26 points)** | No Data |

**Narrative Teacher A**

Teachers, please complete the narrative portion of the recommendation using specific examples from your work with this student to indicate how the student demonstrates these qualities: ability to work cooperatively and meaningfully in groups; openness to new and diverse situations; goals for academic growth; creativity; and intellectual and social maturity. Please print your narrative on school, personal, or professional letterhead. Sign and date both the printed rating scale and narrative and return them to the guidance office or as otherwise directed.

| Signature of Teacher | Printed Name | Date |
| --- | --- | --- |
| No Data | No Data | No Data |
| Email Address | Phone # | No Data |
|  |  |  |

| Applicant's Full Name |  |
| --- | --- |

**INFORMATION ON THIS PAGE MUST BE COMPLETED BY THE APPROPRIATE ADULT**

### Adult Recommendation B

This recommendation must be completed by any teacher/instructor/advisor/adult (outside of the student's family) who is familiar with the student’s work. There are two required parts to the recommendation: a rating scale and a narrative.

Rating Scale Adult B

1. What course or program of studies has the student taken under your supervision? In what year(s)?

1. Please estimate the extent to which the student has demonstrated in your class(es) the qualities listed below. Use the scale from 0-2 as indicated. Be sure to respond to all qualities; items omitted are included as a zero when computing a score. Please use only whole number values.

**0=Good (Above Average) 1=Excellent (Top 10 Percent) 2=Outstanding (Top 2-3 Percent)**

| No Data | **Quality** | **Score** |
| --- | --- | --- |
|  | Motivation and initiative | No Data |
|  | Self-direction | No Data |
|  | Intellectual curiosity | No Data |
|  | Independence of thought | No Data |
|  | Originality of ideas | No Data |
|  | Use of higher-level thinking skills | No Data |
|  | Attitude toward learning | No Data |
|  | Ability to contribute to a group process | No Data |
|  | Willingness to accept ideas of others | No Data |
|  | Emotional stability, maturity, and self-discipline | No Data |
|  | Openness to new experiences | No Data |
|  | Cooperative behavior | No Data |
|  | Respect and tolerance for the views of others | No Data |
| No Data | **Subtotal A (out of 26 points)** | No Data |

**Narrative Adult B**

Recommender, please complete the narrative portion of the recommendation using specific examples from your work with this student to indicate how the student demonstrates these qualities: ability to work cooperatively and meaningfully in groups; openness to new and diverse situations; goals for academic growth; creativity; and intellectual and social maturity. Please print your narrative on school, personal, or professional letterhead. Sign and date both the printed rating scale and narrative and return them to the guidance office or as otherwise directed.

| Signature of Adult | Printed Name | Date |
| --- | --- | --- |
| No Data | No Data | No Data |
| Email Address | Phone # | No Data |
|  |  |  |

| Applicant's Full Name |  |
| --- | --- |

**INFORMATION ON THIS PAGE MUST BE COMPLETED BY THE GIFTED EDUCATION OR**

**PRIVATE SCHOOL REGIONAL COORDINATOR**

**THIS PAGE DOES NOT NEED TO BE INCLUDED WITH YOUR APPLICATION**

### 2024 Summer Residential Governor’s School Academic Scores Page

1. **Career Highlights: Activities, Research, & Honors**

1 or 2 points possible per activity/program; no more than 3 may be counted.  (6 max)

1 or 2 points possible per research/study experience; no more than 3 may be counted.  (6 max)

1 or 2 points possible per honor/recognition; no more than 3 may be counted  (6 max)

**TOTAL I: (      Activities) + (      Research) + (      Honors) =       (18 max)**

1. **Essay Evaluation**

Reader One: Rate as 6 5 4 3 2 1

Reader Two: Rate as 6 5 4 3 2 1

**TOTAL II: [(      Reader One) + (      Reader Two)] x 2 =       (24 max)**

1. **Teacher/Adult Recommendations**

**Rating Scale:**

[Teacher A       (26 max) + Adult B       (26 max)] **divided by** 2 =       (26 max)

**Narrative Evaluation:**

[Teacher A       (6 max) + Adult B       (6 max.)] **multiplied by** 2 =       (24 max)

**TOTAL III: [(      Rating Scale) + (      Narrative)] multiplied by .52 =       (26 max)**

1. **Applicant Aptitude and Achievement**

Mark the correct response in each category. Include test information below. Use scale (8, 7, 6, 5, 4 or 3) to assign points to each category. Private schools should consider the courses their students take that are comparable to AP/IB/Cambridge/AYGS courses when determining course difficulty.

| **Norm-referenced Test 1** | No Data | **Norm-referenced**  **Test 2** | No Data | **Grade Point Average** | No Data | **Course Difficulty** | No Data | No Data |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (99-98%) | **8** | (99-98%) | **8** | 4.0-3.8 | **8** | College scholar… | **8** | No Data |
| (97-95%) | **7** | (97-95%) | **7** | 3.7-3.5 | **7** | Challenging… | **7** | No Data |
| (94-90%) | **6** | (94-90%) | **6** | 3.4-3.0 | **6** | Moderate degree… | **6** | No Data |
| (89-85%) | **5** | (89-85%) | **5** | 2.9-2.5 | **5** | General program… | **5** | No Data |
| (84-80%) | **4** | (84-80%) | **4** | 2.5-2.0 | **4** | No Data | No Data | No Data |
| (<80%) | **3** | (<80%) | **3** | (<2.0) | **3** | No Data | No Data | No Data |
| **TOTAL IV:** |  | **+** |  | **+** |  | **+** |  | **(32 max)** |

| Test 1: | No Data | Date Taken: | No Data |
| --- | --- | --- | --- |
| Test 2: | No Data | Date Taken: | No Data |

**GRAND TOTAL: (Add Totals of Parts I + II + III + IV) =**

***Round to the nearest hundredth; e.g., 92.36*  (100 max)**