**8th Grade GT ELAR Project**

***The Testing*—Joelle Charbonneau**

**Project Topics:**

Choose one of the following topics.

* Water conservation
* Water treatment
* Irrigation/transportation of water to drought-stricken areas
* Hybrid plants
* Genetically modified plants
* Soil conservation
* Soil treatment/revitalization
* Technology reclamation/recycling
* Wind energy—production and storage
* Solar energy—production and storage
* Earthquake architecture
* Genetic mutations in humans
* Ocean trash (specifically plastic island floating in the Pacific)
* Reverse/cleanse the effects of nuclear exposure in the environment

**Where to Find Some of the Information:**

* Use the school’s data bases for history and background information.
* <http://www.howstuffworks.com/> Use the preceding website for understanding how the concept works
* Be sure to create a bibliography in Word; use worldcat.org to assist with documentation in MLA format
* **Water conservation**
	+ <http://wateruseitwisely.com/100-ways-to-conserve/>
	+ <http://environment.nationalgeographic.com/environment/freshwater/water-conservation-tips/>
	+ <http://www.epa.gov/oaintrnt/water/>
	+ <http://www.hpwd.com/>
	+ <http://www.swcs.org/>
* **Water treatment**
	+ <http://water.epa.gov/learn/kids/drinkingwater/watertreatmentprocess.cfm>
	+ <http://www.cdc.gov/healthywater/drinking/public/water_treatment.html>
	+ <http://www.princeton.edu/~oa/manual/water.shtml>
	+ <http://www.sciencedaily.com/articles/w/water_purification.htm>
* **Irrigation/transportation of water to drought-stricken areas**
	+ <https://water.usgs.gov/edu/wuir.html>
	+ <http://lubbock.tamu.edu/programs/disciplines/irrigation-water/>
	+ <http://www.epa.gov/oecaagct/ag101/cropirrigation.html>
	+ <http://www.epa.gov/oecaagct/ag101/cropirrigation.html>
* **Hybrid plants**
	+ <http://www.livinghistoryfarm.org/farminginthe30s/crops_03.html>
	+ <http://aggie-horticulture.tamu.edu/archives/parsons/vegetables/seed.html>
	+ [https://www.princeton.edu/~achaney/tmve/wiki100k/docs/Hybrid\_(biology).html](https://www.princeton.edu/~achaney/tmve/wiki100k/docs/Hybrid_%28biology%29.html)
	+ <http://www.sciencedaily.com/articles/h/hybrid.htm>
* **Genetically modified plants**
	+ <http://www.isaaa.org/resources/publications/pocketk/1/>
	+ <http://www.gmo-compass.org/eng/grocery_shopping/crops/>
	+ <http://www.csa.com/discoveryguides/gmfood/overview.php>
	+ <http://news.discovery.com/tech/biotechnology/ten-genetically-modified-crops.htm>
* **Soil conservation**
	+ <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcs143_021978>
	+ <http://www.swcs.org/>
	+ <http://www.infonet-biovision.org/default/ct/265/soilManagement>
	+ <http://greenliving.lovetoknow.com/10_Ways_to_Conserve_Soil>
* **Soil treatment/revitalization**
	+ <http://bloomthedesert.com/revitalizing-soil>
	+ <http://www.epa.gov/landrevitalization/download/fs_urban_soils.pdf>
	+ <http://naturalvitality.com/natural-revitalization/>
	+ <http://www.ars.usda.gov/research/projects/projects.htm?accn_no=424265>
* **Technology reclamation/recycling**
	+ <http://www.reclamationtech.com/>
	+ <http://www.usbr.gov/research/>
	+ <http://www.hudsontech.com/reclamation-services/>
	+ <http://www.electronicsrecycling.org/Public/ContentPage.aspx?pageid=73>
* **Wind energy—production and storage**
	+ <http://www.awea.org/>
	+ <http://www.eia.gov/kids/energy.cfm?page=wind_home-basics-k.cfm>
	+ <http://www.renewableenergyworld.com/rea/tech/wind-power>
	+ <http://environment.nationalgeographic.com/environment/global-warming/wind-power-profile/>
* **Solar energy—production and storage**
	+ <http://solarenergy.com/>
	+ <http://www.solarenergy.org/>.
	+ <http://www.seia.org/about/solar-energy>
	+ <http://www.eia.gov/kids/energy.cfm?page=solar_home-basics-k.cfm>
* **Earthquake architecture**
	+ <http://www.curee.org/architecture/>
	+ <http://science.howstuffworks.com/engineering/structural/earthquake-resistant-buildings.htm>
	+ <http://www.devalt.org/newsletter/sep03/of_2.htm>
	+ <http://www.wbdg.org/ccb/DHS/fema454.pdf>
	+ <https://www.fema.gov/media-library/assets/documents/8669?id=2418>
* **Genetic mutations in humans**
	+ <http://ghr.nlm.nih.gov/handbook/mutationsanddisorders/genemutation>
	+ <http://www.genome.gov/10001204>
	+ <http://www.hgmd.org/>
	+ <http://www.genomesunzipped.org/2013/12/how-emerging-targeted-mutation-technologies-could-change-the-way-we-study-human-genetics.php>
* **Ocean trash (specifically plastic island floating in the Pacific)**
	+ <http://news.nationalgeographic.com/news/2009/08/090820-plastic-decomposes-oceans-seas.html>
	+ <http://www.theecologist.org/campaigning/2138205/microplastic_soup_the_state_of_our_oceans.html>
	+ <http://news.discovery.com/earth/oceans/pacific-ocean-plastic-increase-120509.htm>
	+ <http://plasticsoupfoundation.org/eng/solutions/>
* **Reverse/cleanse the effects of nuclear exposure in the environment**
	+ <http://www.epa.gov/radiation/rert/nuclearblast.html>
	+ <http://www.greenpeace.org/international/en/campaigns/peace/abolish-nuclear-weapons/the-damage/>
	+ <http://www.ctbto.org/nuclear-testing/the-effects-of-nuclear-testing/general-overview-of-theeffects-of-nuclear-testing/>
	+ <http://www.atomicarchive.com/Effects/>

**Who to Contact in the Area:**

You are to use the contact information given below to find an expert in the field you are researching. You may need to find another expert on your topic if the options below do not work for you and your partner. Ask them questions that you need clarified from research and also use them to troubleshoot the possible solution you and your partner(s) have created.

* **Water conservation**
	+ High Plains Water District
	+ 2930 Ave. Q
	Lubbock, TX 79411
	+ Phone: 806.762.0181
* **Water treatment**
	+ City of Lubbock—Water Department
	+ 1302 Mac Davis Lane
	Lubbock, Texas 79401
	+ Phone: (806) 775 - 2592
* **Irrigation/transportation of water to drought-stricken areas**
	+ Texas Tech University—Department of Mechanical Engineering
	+ 101 Mechanical Engineering Building
	Box 41021, Lubbock, TX 79409-1021
	+ Phone: 806.742.3563
	+ [www.me.ttu.edu](http://www.me.ttu.edu)
* **Hybrid plants**
	+ Texas Tech University—Department of Biology
	+ 108 Biology Building
	Box 43131, Lubbock, TX 79409-3131
	+ Phone: 806.742.2715
	+ [www.biol.ttu.edu/default.aspx](http://www.biol.ttu.edu/default.aspx)
	+ Texas Tech University—College of Agricultural Sciences
	+ 263 Plant Science Building
	Box 42122, Lubbock, TX 79409-2122
	+ Phone: 806.742.2838
	+ [www.pssc.ttu.edu/index.php](http://www.pssc.ttu.edu/index.php)
* **Genetically modified plants**
	+ Texas Tech University—Department of Biology
	+ 108 Biology Building
	Box 43131, Lubbock, TX 79409-3131
	+ Phone: 806.742.2715
	+ [www.biol.ttu.edu/default.aspx](http://www.biol.ttu.edu/default.aspx)
	+ Texas Tech University—College of Agricultural Sciences
	+ 263 Plant Science Building
	Box 42122, Lubbock, TX 79409-2122
	+ Phone: 806.742.2838
	+ [www.pssc.ttu.edu/index.php](http://www.pssc.ttu.edu/index.php)
* **Soil conservation**
	+ Texas Tech University—College of Agricultural Sciences
	+ 263 Plant Science Building
	Box 42122, Lubbock, TX 79409-2122
	+ Phone: 806.742.2838
	+ [www.pssc.ttu.edu/index.php](http://www.pssc.ttu.edu/index.php)
* **Soil treatment/revitalization**
	+ Texas Tech University—College of Agricultural Sciences
	+ 263 Plant Science Building
	Box 42122, Lubbock, TX 79409-2122
	+ Phone: 806.742.2838
	+ [www.pssc.ttu.edu/index.php](http://www.pssc.ttu.edu/index.php)
* **Technology reclamation/recycling**
	+ Brad Guidy, Chief Information Officer of STS Electronic Recycling Inc.
	+ Phone: 903-245-2512
* **Wind energy—production and storage**
	+ Texas Tech University—National Wind Institute
	+ **10th & Canton
	Mail Stop 3155
	Lubbock, TX 79409-3155**
	+ **Phone: (806) 742-3476**
	+ **Email:** **nwi@ttu.edu**
* **Solar energy—production and storage**
	+ Texas Tech University Wind Science and Engineering Research Center
	+ Reese Center
	+ 555 Reese Technology Building
	Box 41163, Lubbock, TX 79409-1163
	+ Phone: 806.742.4567
	+ [www.tiehh.ttu.edu](http://www.tiehh.ttu.edu)
* **Earthquake architecture**
	+ Andrew Vernooy—Texas Tech University—College of Architecture
	+ 1005 Architecture, Box 42091
	+ Phone: 806-742-3136
* **Genetic mutations in humans**
	+ Texas Tech University—Department of Biology
	+ 108 Biology Building
	Box 43131, Lubbock, TX 79409-3131
	+ Phone: 806.742.2715
	+ [www.biol.ttu.edu/default.aspx](http://www.biol.ttu.edu/default.aspx)
* **Ocean trash (specifically plastic island floating in the Pacific)**
	+ Texas Tech University—College of Agricultural Sciences
	+ 263 Plant Science Building
	Box 42122, Lubbock, TX 79409-2122
	+ Phone: 806.742.2838
	+ [www.pssc.ttu.edu/index.php](http://www.pssc.ttu.edu/index.php)
* **Reverse/cleanse the effects of nuclear exposure in the environment**
	+ Texas Tech University—College of Agricultural Sciences
	+ 263 Plant Science Building
	Box 42122, Lubbock, TX 79409-2122
	+ Phone: 806.742.2838
	+ [www.pssc.ttu.edu/index.php](http://www.pssc.ttu.edu/index.php)

**The To Do List:**

* History or background on the issue or concept**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* How the basic concept works according to your research**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Possible solutions or examples that have been tried to solve the issue or understand the concept**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Based on the research, your possible solution**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Future Changes to the issue or concept—**Due Date** \_\_\_\_\_\_\_\_\_\_
* Contact an expert from the suggestions listed**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Paper for the first four bullets include MLA formatted Bibliography**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Create a presentation that includes the first four bullets**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Include a hands-on aspect to the presentation if possible**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
* Presentation to the class**—Due Date \_\_\_\_\_\_\_\_\_\_\_**
	+ In the presentation, be sure to explain how this issue or topic relates to the novel, *The Testing*.

**Grade Guide**

|  |  |
| --- | --- |
| **Assignment** | **Number and Type of Grade** |
| Plagiarism Agreement |  1 Daily |
| History of the Concept or Issue |  1 Daily |
| How the Concept or Issue Works |  1 Daily |
| Possible Solutions or Examples for the Concept or Issue Tried and Failed |  1 Daily |
| Possible Solutions or Examples of the Concept or Issue Tried and Worked |  1 Daily |
| Future Changes of Solutions or Examples of the Concept or Issue |  1 Daily |
| Six Sources |  1 Daily |
| Expert Contact |  1 Daily |
| Expert Notes |  1 Daily |
| Bibliography |  1 Test |
| Notes from Sources |  1 Test |
| Presentation Delivery |  1 Test |
| Presentation Information |  1 Test |
| Presentation Graphics |  1 Test |

**Research Grading Rubric**

**Student Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Title of Research Paper\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Research Skills \_\_\_\_\_ Organization \_\_\_\_\_ Content \_\_\_\_\_ Mechanics \_\_\_\_\_ Format \_\_\_\_\_**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Skill** | **-1****62** | **1****65** | **+1****68** | **-2****72** | **2****75** | **+2****78** | **-3****82** | **3****85** | **+3****88** | **-4****92** | **4****95** | **+4****98** | **Total Score** |
| **Research Skills** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Use of sources to support thesis |  |  |  |  |  |  |  |  |  |  |  |  |
| Use of quotes |  |  |  |  |  |  |  |  |  |  |  |  |
| Use of paraphrasing |  |  |  |  |  |  |  |  |  |  |  |  |
| Use of parenthetical notation |  |  |  |  |  |  |  |  |  |  |  |  |
| **Organization** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hook |  |  |  |  |  |  |  |  |  |  |  |  |
| Bridge |  |  |  |  |  |  |  |  |  |  |  |  |
| Thesis  |  |  |  |  |  |  |  |  |  |  |  |  |
| Topic sentences |  |  |  |  |  |  |  |  |  |  |  |  |
| Clincher/transitional sentences |  |  |  |  |  |  |  |  |  |  |  |  |
| Supporting details |  |  |  |  |  |  |  |  |  |  |  |  |
| Textual evidence from sources |  |  |  |  |  |  |  |  |  |  |  |  |
| **Content** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Transitional words |  |  |  |  |  |  |  |  |  |  |  |  |
| Paragraph development |  |  |  |  |  |  |  |  |  |  |  |  |
| Support of thesis statement |  |  |  |  |  |  |  |  |  |  |  |  |
| Textual evidence from sources |  |  |  |  |  |  |  |  |  |  |  |  |
| Clarity of ideas in paragraphs |  |  |  |  |  |  |  |  |  |  |  |  |
| Clarity of ides throughout paper |  |  |  |  |  |  |  |  |  |  |  |  |
| Flow of ideas  |  |  |  |  |  |  |  |  |  |  |  |  |
| Varied syntax |  |  |  |  |  |  |  |  |  |  |  |  |
| Elevated diction (vocabulary) |  |  |  |  |  |  |  |  |  |  |  |  |
| **Mechanics** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spelling  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capitalization |  |  |  |  |  |  |  |  |  |  |  |  |
| Punctuation |  |  |  |  |  |  |  |  |  |  |  |  |
| Verb tense |  |  |  |  |  |  |  |  |  |  |  |  |
| Pronoun referents |  |  |  |  |  |  |  |  |  |  |  |  |
| Basic usage |  |  |  |  |  |  |  |  |  |  |  |  |
| **Format** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Title page |  |  |  |  |  |  |  |  |  |  |  |  |
| Final paper |  |  |  |  |  |  |  |  |  |  |  |  |
| Integrated quotes |  |  |  |  |  |  |  |  |  |  |  |  |
| Indented quotes (if used) |  |  |  |  |  |  |  |  |  |  |  |  |
| Parenthetical notation |  |  |  |  |  |  |  |  |  |  |  |  |
| Works Cited |  |  |  |  |  |  |  |  |  |  |  |  |

**Notes Page—Source**

**Source Documentation (MLA Format)**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- |
| **Questions** **from the** **puzzle pieces** | **Notes****Direct quote from the source in quotation marks and page number** | **Notes****Just the** **paraphrased** **facts** |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |