**District Scientific Research Paper Guidelines**

**2014-2015**

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**Timeline**

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| **Nine Weeks** | **Process** |
| 1st | Topic Selection ***due A day: 9/15, B day: 9/16***Researching; Introduction and Thesis Statement |
| 2nd | 1st Draft - 3 Body Paragraph – 500 Words or more (Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) |
| 3rd | 2nd Draft – Peer Review: Revising and Editing (Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) |
| 4th | Final Draft – Revising and Editing |

Final Draft Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\*Alternative Product** – teacher’s discretion

**Topics to choose from below**

***(if there is an alternative topic you would like to do teacher permission required)***

***Due🡪 A day: 9/15; B day: 9/16***

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| **Medical Issues:*** nanotechnology
* childhood obesity
* childhood/adolescent diabetes
* GMO's (genetically modified organisms)
* Stem Cell Research
* Drug Testing
* Vaccines (childhood, newborn)
* Chimara (DNA)

**Disease:** * choose a specific bacteria or virus
* choose a specific outbreak (ex. Ebola, West Nile)
* antibiotic resistance

**Careers:** * Choose any career related to STEM (science technology engineering and mathematics)

**Scientist:** * Choose a specific scientist to research and their discoveries

Examples: Neil de Grasse Tyson, Bill Nye, Rosalind Franklin, Francis Crick, James Watson, Galileo Galilei, etc…**Cellular Processes:** * Photosynthesis
* Cellular Respiration
* Protein Synthesis
* Mitosis
* Meiosis

**Cells:** * Choose a cellular organelle
* Prokaryotes
* Eukaryotes
 | **Cancer:*** choose a specific type

**Environmental Issues:*** global warming/greenhouse effect
* pollution (air, water, land)
* endangered species
* composting
* alternative forms of energy

**Genetics:** * DNA (ie. structure, discovery, use in body)
* RNA (ie. structure, discovery, use in body)
* Genetic Disorders (choose specific type)
* Genetic Testing
* Epigenetics
* Human Genome Project
* Biotechnology
* DNA Fingerprinting
* Forensic Testing
* Gene Mutations
* Chromosomal Mutations

 **Body Systems:** * Choose specific body system or organ
* Choose a specific injury/illness/surgery

**Biomolecules:** * Carbohydrates
* Lipids
* Proteins
* Enzymes
* Nucleic Acids
* Autosomal Dominant inheritance/disorders
* Autosomal Recessive inheritance /disorders
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**Writing Process**

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| **Nine Weeks** | **Process** |
| **1st**1. Teacher allocate class time to utilize mini-lessons for the manipulation of information such small group discussions (based on topic), Pros/cons, Venn diagrams, Take a stand/position, what would happen if…, List the facts, Create a timeline, etc.
2. Students need to have an opportunity to discuss their research and understand it.
 | 1. Topic Selection – students choose a topic from the list or submit a topic for approval.

**Due: A- 9/15; B 9/16**1. Research – students are allocated time to research topic; use at least 4 sources.
2. MLA format – used for work cited page. See Sample MLA format.
3. Complete introduction/thesis statement paragraph. Save research paper on google drive.

**Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| **2nd**1. Students submit a formatted 500 word document to be reviewed and graded by the teacher.
2. Teacher may take this opportunity to host another class discussion or mini-lesson session for the students.
 | 1. Host another mini-lesson session so students can internalize researched information – see 1st week’s activities.
2. Body Paragraphs - students begin writing their **1st Draft** – 500 words or more (include word count in document).Save research paper on google drive.

**Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| **3rd**1. Peer review of student papers. Use rubric for grading of research papers.

**Date of review: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**1. Host another mini-lesson session to discuss papers and reviewed information.
 | 1. Peer Review – students revise and edit research papers.
2. Host another mini-lesson session so students can discuss changes in research papers and review scientific research – see 1st nine weeks’ activities.
3. **2nd Draft** of research paper is due- includes introduction and body paragraphs.Save research paper on google drive.

**Due: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| **4th**1. Students submit their final copy of their scientific research paper for evaluation.
2. All components of the paper should be included: introduction, body paragraph, conclusion, and work cited page in MLA format.
3. See sample of MLA format
4. Formatted research paper is typed, 12 pts, Calibri font, and doubled spaced.
 | 1. Student revising and editing of research paper.
2. **Final Draft** of research paper is due – must include work cited page (MLA Format) and parenthetical in text quotes (author, page #)Save research paper on google drive.

***Final Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |

**Research Paper Reminder:**

**1. Must use primary sources: journals/abstract; books**

**2. Secondary sources: editorials, opinions, magazines, articles**

***\*\*\*Wikipedia, ask.com etc…are not reliable sources\*\*\****

**MLA Format**

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**Sample Paper**

