### Dates:

### Essential Questions:

Essential Questions: How can I prevent disease? How can society prevent disease? How does society manage a disease?

### Learning Objectives:

Learning Objectives: Students will understand the difference between the different types of diseases. Students will understand the biological and social implications of both individual and societies response to disease. Students will complete an individual disease review, complete and present a disease case study, complete an interpretive essay on HIV/TB, read the novel "The Immortal Life of Henrietta Lacks," and complete book reviews with interpretive essay.

### Skills Standards:

**College and Career Readiness Anchor Standards from the CCSS.**

**Demonstrate independence.**

Students can, without significant scaffolding, comprehend and evaluate complex texts across a range of types and disciplines, and they can construct effective argument and convey intricate or multifaceted information. Likewise, students are able independently to discern a speaker's key points, request clarification, and ask relevant questions. They build on others’ ideas.

**Build strong content knowledge.**

Students establish a base of knowledge across a wide range of subject matter by engaging with works of quality and substance. They become proficient in new areas through research and study. They read purposefully and listen attentively to gain both general knowledge and discipline-specific expertise. They refine and share their knowledge through writing and speaking.

**Respond to the varying demands of the audience, task, purpose, and discipline.**

Students adapt their communication in relation to audience, task, purpose, and discipline. They set and adjust purpose for reading, writing, speaking, listening, and language use as warranted by the task. They appreciate nuances, such as how the composition of an audience should affect tone when speaking and how the connotations of words affect meaning. They also know that different disciplines call for different types of evidence (e.g., documentary evidence in history, experimental evidence in science).

**Comprehend as well as Critique.**

Students are engaged and open-minded—but discerning—readers and listeners. They work diligently to understand precisely what an author or speaker is saying, but they also question an author’s or speaker’s assumptions and premises and assess the veracity of claims and the soundness of reasoning.

**Value evidence.**

Students cite specific evidence when offering an oral or written interpretation of a text. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener, and they constructively evaluate others’ use of evidence.

**Use technology and digital media strategically and capably.**

Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals.

**Come to understand other perspectives and cultures.**

Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own.

**National (NMPED) Health Education Standards Grades 9-12**

**Content Standard 1:** Students will comprehend concepts related to health promotion and disease prevention.

- **9-12 Benchmark 1:** analyze how behavior can impact health maintenance and disease prevention:
- **9-12 Benchmark 2:** describe the interrelationships of mental, emotional, social and physical health throughout life:
- **9-12 Benchmark 3:** explain the impact of personal health behaviors on the functioning of body systems:
<table>
<thead>
<tr>
<th>Strategies:</th>
<th>Interactive Lecture, small group work, individual research, small group case study. Reading a novel, seminar discussion, ACE interpretive essays</th>
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</thead>
<tbody>
<tr>
<td>Literacy/Math Strategies:</td>
<td>Group discussion based on clarification of text. Students will be exposed to reading at or have to analyze math and science principles as presented through some of the readings.</td>
</tr>
<tr>
<td>Lesson Description:</td>
<td>Interactive Discussion - compare the definition of disease with what we know about Autism. Is Autism a disease?</td>
</tr>
</tbody>
</table>

Research components

1. Students will individually research a particular disease using the disease review. Students will be given one of the following diseases: Hanta Virus, Cholera, Gonorrhea, Malaria, Ebola, Chagas, Dengue Fever, Mad Cow, SARS, Avian Bird Flu, Anthrax, Hepatitis B, Syphilis, West Nile, Multiple Sclerosis, Cryptosporidiosis, Chlamydia, Lyme Disease, Giardia, Diabetes. Please share the doc with hugginsdocs@gmail.com. Students will present their disease in class.

2. Students will then jigsaw the following case studies. Small groups will complete individual case studies and then teach their content to the rest of the class. After completing the case study students will create a visual presentation using Prezi software to help teach the rest of the class. The Prezi must include at least 8 pathways with at least 5 pictures per presentation.

Using evidence from the information learned in class, students will generate a 350 word interpretive essay on the following question - "If HIV is preventable and TB is curable why haven’t we eradicated either?”

Novel Components -
The Immortal Life of Henrietta Lacks – Rebecca Skloot (2010.)

Part 1 due 09/27, Seminar Discussion/Content Quiz. Part 2 Due 10/02 Seminar Discussion/Content Quiz Part 3 Due 10/07. Final Book Review - Seminar Discussion.
**Novel Questions:** Should patient consent be required to store and distribute their tissue for research? Should doctors disclose their financial interests? Would this make any difference in achieving fairness? Or is this not a matter of fairness or an ethical issue to begin with?

Using the book as a guide, describe the process of scientific inquiry. Examine the often contradictory forces of altruism and profit as they influenced research related to HeLa. What are the risks and benefits of allowing profit to guide research? What are the obstacles involved with conducting research purely for altruistic reasons?

The narrative arc involving Deborah and Skloot follows that of an archetypal hero journey. Analyze the story as a hero journey with Skloot as the hero, and then change your perspective and analyze the story with Deborah as the hero. (Traditional response only.)

**Response Options** - Traditional - 500 word opinion essay based on evidence from the book (about 2 pages) Visual Slideshow - 250 words of text with at least 8 pictures to support your opinion based on evidence from the text. (Powerpoint/Prezi.)

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**Accommodations:** (Sheltered Instruction) Utilize Teaching and Learning with Text as necessary to help students through difficult text. Explicit explanations of complex vocabulary. Gifted Modifications - Open ended, challenging materials, & approaches. Opportunity to work with intellectually challenging peers. Access to a variety of complex materials. Access to advanced technologies. Flexibility in types of product outcomes. Problem solving and inquiry experiences.

**Environment:** Classroom seating arranged in small groups. Use of computer lab. Seminar seating. Materials: Individual Disease Review - [google doc](#) National Center for Case Study Teaching in Science, University at Buffalo - diabetes case study Parts 1 through 2, Abracadabra - HIV Parts 1 and 2, 1918 influenza Parts A and B. Will need 2 groups to take sides, mdr_tb Parts 1 and 2, Melanoma Parts 1 through 4, Inactive Brains - Obesity Parts 1 through 4, Seasonal Affective Disorder -

[case study reviews](#) google doc-

*The Immortal Life of Henrietta Lacks* – Rebecca Skloot (2010.) HenriettaLacksFinalBookReview – Due Final HeLa Project –

**Assessment:** Google Doc - Individual Disease Review Class Presentation, Case Study notes in Composition Book and Prezi sideshow presentation, Case Study Reviews, Novel - Part 1 - Seminar Discussion/Content Quiz. Part 2 Seminar Discussion/Content Quiz Part 3 Final Book Review - Seminar Discussion.

**Reflection:**

- What worked well?

- How can I build on what the students have learned?

- What will I do differently next time?
Disease Review

Please make a copy then rename the file with your disease and last name before sharing it with Hugginsdocs@gmail.com

Diseases include – Hanta Virus, Cholera, Ghonorrhea, Malaria, Ebola, Chagas, Dengue Fever, Mad Cow, SARS, Avian Bird Flu, Anthrax, Hepatitis B, Syphilus, West Nile, Multiple Sclerosis, Cryptosporidiosis, Chlamydia, Lyme Disease, Giardia, Diabetes.

Disease Review

Each review should address the following questions, should have **3 links** to legitimate sources that you used and have **3 pictures**.

| Disease Name: |
| Disease Origin and History: |
| Describe the symptoms and what it might be like to have the disease: |
| Describe how the disease spreads among people: |
| Describe the population that is most susceptible: |
| Describe past efforts to fight the disease, why have these efforts been successful or unsuccessful: |
| Describe the reasons why the disease has not been eradicated: |
| Describe some programs that will prevent infection in the future: |
What is the historical context (if any) of the case study?
What is the problem that is presented?
Who are the Stakeholders?
Describe solutions posed or resolution or issues raised by the case study?
1.
2.
3.
What do you think about this issue?
How did the presenters do? 1 2 3 4 5
Why?
Book Review The Immortal Life of Henrietta Lacks

Final review: Life, Death, and Immortality - On a separate sheet of paper

Name: Date: Author: Rebecca Skloot

Describe the specific legal issues raised in the book. Cite evidence as you make your point. (wait for the next question to answer the ethical issues.)

Describe the specific ethical issues raised in the book. Cite evidence as you make your point.

Use specific examples to reflect on how the scientific method is used in the book. From Chicken Hearts to the Polio vaccine, to current research described in the book.

What have you learned from reading this book?

What have you learned about Cancer Cells from reading this book?

Why is this an important story?
Choose One Question and One type of response.

Questions:
1. Should patient consent be required to store and distribute their tissue for research? Should doctors disclose their financial interests? Would this make any difference in achieving fairness? Or is this not a matter of fairness or an ethical issue to begin with?

2. Using the book as a guide, describe the process of scientific inquiry. Examine the often contradictory forces of altruism and profit as they influenced research related to HeLa. What are the risks and benefits of allowing profit to guide research? What are the obstacles involved with conducting research purely for altruistic reasons?

3. The narrative arc involving Deborah and Skloot follows that of an archetypal hero journey. Analyze the story as a hero journey with Skloot as the hero, and then change your perspective and analyze the story with Deborah as the hero. (Traditional response only.)

Response Options -
1. Traditional - 500 word opinion essay based on evidence from the book (about 2 pages)
2. Visual Slideshow - 250 words of text with at least 8 pictures to support your opinion based on evidence from the text. (Powerpoint/Prezi.)

Use the Gifted Rubric as a Guide for assessment.
### General Rubric for Projects:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Exemplary</th>
<th>Mastery</th>
<th>Partial Mastery</th>
<th>Not Yet Mastered</th>
<th>Incomplete</th>
<th>Totals/ Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Requirements</strong></td>
<td>All</td>
<td>All</td>
<td>Most</td>
<td>Some</td>
<td>Few or no</td>
<td>Requirement were met.</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Answers the essential question extensively with direct citation of evidence and expands upon answer including significant personal impact.</td>
<td>Mostly Answers the essential question extensively, cites evidence and partially relates to larger ideas.</td>
<td>Partially Answers the essential question, with vague evidence and partially relates to larger ideas.</td>
<td>Minimally Answers the question, resembling casual register.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>Content is well organized. Material presented in a logical/creative and precise format that demonstrates advanced understanding of concepts.</td>
<td>Content is organized and presented in a logical format. Beginning to feel a little copy and paste.</td>
<td>Partially organized with vague structure relating to content and or copy and paste feel.</td>
<td>Minimally organized with arbitrary or no structure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td>No misspellings or grammatical errors. Formal or consultative register.</td>
<td>A few misspellings or grammatical errors. Formal or consultative register.</td>
<td>Three or fewer misspellings or grammatical errors.</td>
<td>Four or more misspellings or grammatical errors. Resembling casual register.</td>
<td>Casual register.</td>
<td></td>
</tr>
</tbody>
</table>

**Date Due:** [Date]

**Requirements:**