

DNA and Genetics Assignment – TASK

Context:

This unit is part of a High School Biology class

The students have already completed a unit on cells, tissue and organ systems. This unit is about genetics and inheritance.

| Beginning: Introduction/Hook | Middle: skills, tasks, assessments | End: summative assessment |
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| <p>Read excerpt from the Prologue of <i>The Immortal Life of Henrietta Lacks</i> Read the Reader’s Guide for <i>The Immortal Life of Henrietta Lacks</i></p> <p>In small groups have students identify questions they have</p> <p>Ask students to consider this question: If we were going to decide if this use of Henrietta’s cells should or shouldn’t continue, what do we need to know about cells, DNA and genetic research?</p> | <p>DNA, chromosomes, cell reproduction--quiz</p> <p>genetic traits (dominant, recessive)--family tree activity</p> <p>mutations and disease--disease research and presentations; quiz</p> <p>Genetic research--the basics-exit ticket</p> <p>Ethics (of genetic engineering and research)--reading, discussion, exit ticket</p> | <p>Ethics Panel Hearing: (see below)</p> <p>Should we continue to use the HeLa cell line for genetic research? Why or why not and if so, under what conditions?</p> |

Final Assignment: Ethics Panel

1. Based on the preferences you indicated, you have been assigned to present either the case for or against or to be part of the ethics panel hearing this case.

2. If you are on the for/against teams, you should determine roles for each team member. Your options include:
 - a. Attorneys
 - b. expert witnesses from the medical and research field
 - c. other witnesses including patients and members of the Lacks family
 - d. other witnesses you feel will help you present your case

3. If you are on the panel, you should determine the background and expertise of the various members of the panel as well as their general position and beliefs

4. Prepare for a debate on the following question:

Should we continue to use the HeLa cell line for genetic research? Why or why not and if so, under what conditions?

Consider the different issues and topics that relate to this question.

For each, use the Ethics Panel Prep Sheet to think through how different topics relate to your group's position and what other group's might ask you about them.

5. The debate will follow this format:

- a. Introduction (1-2 mins each)
- b. Presentation of the case (5-7 mins each)
- c. Rebuttal (3 mins each)
- d. Questions from the panel (5-7 mins each)
- e. Closing (2 mins each)