Teacher: \_\_ N. Adamse \_\_\_\_\_\_\_\_\_\_

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| Subject | Class | Date | Duration |
| Biology | Bio CPI (B3) | 4/2/21-4/16/21 | 3 x 70 min |

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| Topic | The History of DNA TimelinePart of the unit Cell and their Organelles: The nucleus |
| Grade level | 10th grade |
| Setting | This assignment is done partly at home and partly in the (art) classroom |
| Standard(s) | [State/National Academic Standard(s):](https://sites.google.com/a/wgu.edu/state-specific-information/) **Life Science Standard, level 9-12: LS 1: From molecules to Organisms: Structures and Processes**-*Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins, which carry out the essential functions of life through systems of specialized cells* - *Understand the underlying nature and essence of scientific inquiry* |
| Lesson Objective(s) | **Explain the development of scientific knowledge about DNA****Condition**: *Students are provided with information (article) about how several scientists throughout history have worked and contributed on the present knowledge of DNA***Behavior:** *Students make a presentation in which they show the timeline of the history of DNA knowledge.* **Criterion:** *Students understand and show in their presentation that the development of knowledge about DNA is an ongoing process and that each scientific discovery adds to a more precise understanding what DNA is and how it operates in living organisms.* |

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| Links to previous lesson and prerequisite skills | **Students have already finished a range of topics such as:**-The characteristics of Life, -Scientific methods-Introduction to Ecology, -Introduction to Evolution, -Cells and their organelles, -Photosynthesis and Chloroplasts, -Cell membrane and -Biomolecules-DNA molecules and constructing a model of DNA |
| Links to future lesson | Genetics and Scientific inquiry |

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| Lesson 1-3 | Time | Teacher’s activities Students’ activities  | Resources |
| IntroductionMain ActivityClosing | 10 min180 min20 min | Teacher:-Explains the assignment- Answers questions- Shows an example presentation -Guides and helps students at home over Zoom and students in the classroom in person- Provides feedback-Discusses the article and some excellent presentations with all students on Zoom-Grades the presentations with a rubric | Students:-Listen to the explanation-Ask questions-Watch example presentation-Read the article-Make the presentation-Ask questions-Revise their work-Submit their presentation- Listen and participate in discussing the article and presentations-Revise their presentation after rubric feedback | *-Lap top**-Internet access**- Google Classroom**-Interactive activity schedule with link to assignment* *-Written assignment with link to article**-Google slides or other presentation tool**-Example presentation* |

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| Differentiation Strategies | -Students receive an article with all the information that is needed on their presentation- Students illustrate their writing with diagrams and photos found on the Internet-Students are using a spell check and grammar check program-Students are allowed to revise their work-Students who need it have extra time to submit their work-Students receive in person guidance from teacher if needed- Students received a rubric with all grading criteria and requirements before starting the assignment. |
| Formative assessments | This presentation is a formative assessment meant for learning about scientific strategies to build understanding of a concept. Students are allowed to revise and improve their understanding. assignment. |
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