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| Teacher: Runyan  | Course: Biology  | Period(s): 1,2,4 | Week: 11 |
| Unit Title: Molecular Genetics  |  |  |
| State Standards:  |  |  |

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|  | Standards | Goals | As a result of this lesson the student will be able to: | Instructional Plan | Activities (aligned, sequenced, build, time) | Student Work | (Thinking & Problem Solving, Real World)  | Assessment | (aligned, rubrics, >2, written) | Grouping Method | Materials | Accommodations (IEP, 504, ESOL) |
| **Monday** | H.B.4A.1 H.B.4A.2H.B.4B.1 H.B.4B.2 | Explain the chemical structure of DNA Describe the structural differences between DNA and RNA  |  Quick DNA structure review/ warm-up activity DNA building gizmo activity/ interactive labGuided notes covering RNA structure (time permitting)  |  Quick review/ warm-up activity DNA building Gizmo/ interactive lab and conclusion questions | Quick review/ warm- up (formative) DNA building Gizmo/ interactive lab and conclusion questions (formative)  | Lab/ learning groups  | Student laptops  | Extra time will be given as needed, one to one interactions as needed or requested  |
| **Tuesday** | H.B.4A.1 H.B.4A.2H.B.4B.1 H.B.4B.2 | Describe the structural differences between DNA and RNA | EOC practice questioning Guided notes covering RNA structureGraphic organizer: comparing and contrasting DNA vs. RNA  | EOC practice questioning Guided notes: RNA structure Graphic organizer: comparing and contrasting RNA vs. DNA |  EOC practice questioning (formative)Graphic organizer (formative)  |  |  | Extra time will be given as needed, one to one interactions as needed or requested  |
| **Wednesday** | H.B.4A.1 H.B.4A.2H.B.4B.1 H.B.4B.2 | Explain the chemical structure of DNA Describe the structural differences between DNA and RNA |  Quiz: DNA/ RNA structure and replication Amoeba sisters video: Transcription and Translation Video conclusion questionsIntroduce the beginning of DNA synthesizing proteins  | Quiz: DNA/ RNA structure and replication Video conclusion questions  | Quiz (Summative) Video conclusion questions (formative)  |  |  | Extra time will be given as needed, one to one interactions as needed or requested  |
| **Thursday** | H.B.4A.1 H.B.4A.2H.B.4B.1 H.B.4B.2 | Explain how DNA sequences are transcribed then translated into proteins  | Guided notes on the transcription/ translation/ amino acid coding/ protein synthesis process Transcription and translation practice… coding for amino acids  |  Guided notes: transcription/ translation/ amino acid coding/ protein synthesis Transcription and translation practice… coding for amino acids  | Transcription and translation practice (formative)  |  | Colored pencils, crayons, markers, amino acid coding key  | Extra time will be given as needed, one to one interactions as needed or requested  |
| **Friday** | H.B.4A.1 H.B.4A.2H.B.4B.1 H.B.4B.2 | Explain how DNA sequences are transcribed then translated into proteins  | Snork building activity: Students are given random DNA sequences and must code out their amino acid sequences in order to decipher characteristics… then build the actual Snork  | Snork building activity  | Snork building activity (formative) |  | Colored pencils, crayons, markers, amino acid coding key | Extra time will be given as needed, one to one interactions as needed or requested  |

\* All plans are subject to change. Student progress will be monitored and adjustments will be made.