

<p>Day 1 (55 min) I can statement: (ALL - for the unit)</p>	<p>Day 2 (95 min) I can statement:</p> <ul style="list-style-type: none"> <li>• I can explain the structure of a nucleotide.</li> <li>• I can describe the structure and role of DNA.</li> <li>• I can explain the base pairing rules.</li> </ul>	<p>Day 3 (95 min) I can statement:</p> <ul style="list-style-type: none"> <li>• I can explain the structure of a nucleotide.</li> <li>• I can describe the structure and role of DNA.</li> <li>• I can explain the base pairing rules.</li> </ul>	<p>Day 4 (55 min) I can statement:</p> <ul style="list-style-type: none"> <li>• I can explain the process of DNA replication.</li> </ul>
<p><b>Do Now (5):</b> Introduce students to learning targets for the unit and how they will track their learning throughout the unit. <b>(S)</b></p> <p><b>Agenda</b></p> <ol style="list-style-type: none"> <li>1. <b>Hook (20): <u>DNA Extraction Lab.</u></b> Teacher models &amp; students follow basic instructions for extracting their own DNA</li> <li>2. Introduce students to the long term <b><u>Anchor Activities (10)</u></b> (Tic Tac Toe Learning Menu) for the unit. <b>(C)</b></li> <li>3. <b>Pre-Assessment (15):</b> Students complete <b><u>pre-assessment</u></b> (for whole unit). They score their pre-assessment &amp; track level of understanding <b>(S)</b></li> <li>4. <b><u>Explain independent study (5)</u></b> for those students who achieve an 85% or better on the pre-assessment. Provide students with contract and explain that they must read and sign the contract and have their parent(s)/guardian(s) read and sign the contract before starting the independent study. <b>(R)</b></li> </ol>	<p><b>Do Now (5):</b> Starters (2 students) lead the class through a review of previous day's activities and introduce the Learning Targets for the day. <b>(S)</b></p> <p><b>Agenda</b></p> <ol style="list-style-type: none"> <li>1. <b>Activity (25): <u>DNA Structure Inquiry Puzzle.</u></b> Groups of 3 (readiness levels). During an inquiry investigation, students are provided with the same clues that Watson and Crick used to determine the structure of DNA (Chargaff and Franklin). Students will use rules and DNA subunits (nucleotides) to attempt to build a double helix with correct base pairing rules. Students assemble model, make observations, and prepare to share ideas with group. Afterwards, each group provides one-minute summary explaining their structure and key observations. <b>(F)</b></li> <li>2. <b>Discussion (10):</b> Students leave models at their desks &amp; complete a gallery walk. They leave 1 sticky note at each model other group's model with a comment about how likely it is to be the correct DNA</li> </ol>	<p><b>Do Now (10):</b></p> <ul style="list-style-type: none"> <li>• Review common misconceptions that emerged from Exit Ticket regarding DNA structure.</li> <li>• All students are briefly introduced the DNA through a 3 minute visual presentation.</li> </ul> <p><b>Agenda</b></p> <ol style="list-style-type: none"> <li>1. <b>Activity (30):</b> Groups of 4 (readiness level) and together read a DNA structure article from textbook extension using read aloud and chunking strategies. Before reading, students will preview focus question that has been preselected for their readiness level. Students read article, record key facts, pictures, and supporting evidence for their focus question and transcribe information onto chart paper. <b>(R)</b></li> <li>2. <b>Activity: <u>DNA Carousel (25)</u></b> Each group rotates to other groups, read and discuss poster, and add ideas to the board using sticky notes. When groups reach original poster, team members must summarize class viewpoints and create common group statement. Each group will elect to</li> </ol>	<p><b>Do Now (5):</b> Students are divided into small random groups. Students complete <i>Kahoot It</i> DNA structure review. <b>(F)</b></p> <p><b>Agenda</b></p> <ol style="list-style-type: none"> <li>1. <b>Activity (20):</b> Students complete in <b><u>DNA replication race.</u></b> After race, the teacher will debrief students about process of DNA replication (<b><u>direct instruction.</u></b>)</li> <li>2. <b>Activity (30):</b> Students are paired to complete a <b><u>cubing activity.</u></b> ELL students are paired together. During cubing activity, the concepts of DNA replication will be reinforced. Cubes are designed to <b><u>meet</u></b> expectations with one set designed to scaffold learning for ELL learners. <b>(R) (F)</b></li> <li>3. <b>Formative Assessment: (Next class)</b> Students will complete a targeted short <b><u>written response assessment</u></b> to demonstrate their understanding of DNA replication. Students will use feedback from assessment to determine targets that require correctives. The teacher will provide appropriate correctives tailored for specific targets. <b>(S)</b></li> </ol>

	<p>structure with reasoning (S)</p> <p>3. <b>Activity (25):</b> Teacher reveals that they will build the actual structure following directions from <u>DNA Candy Model</u> now and re-group students randomly based on a Salsa LineUp (1 of each role per group).</p> <ol style="list-style-type: none"> <li><b>Engineer:</b> responsible for building the model</li> <li><b>Presenter:</b> responsible for labeling &amp; communicating</li> <li><b>Researcher:</b> responsible for using tech / reading to check accuracy of candy model (F) (S)</li> </ol> <p>4. <b>Presentations (15):</b> Student presenters take turns presenting new models to class – explaining learning targets using the new model. All students compare &amp; contrast original models from first activity with their new models.</p> <p>5. <b>Exit Ticket (5):</b> Explain DNA's unique structure. (S)</p>	<p>spokespersons to represent group during class-consensus discussion. During discussion students will complete graphic organizer focusing on main ideas. (S)</p> <p>3. <b>Homework explanation (15):</b> <u>TriMind</u> on DNA structure. (C)</p> <p>4. <b>Exit Activity (15): King or Queen of the Classroom review game:</b> 3-4 students sit in chairs in front (they can't have notes), other students get their notes &amp; take turns asking questions to the "kings/queens" if kings/queens are incorrect, they are "de-throned" and replaced by question-asker. (S)</p>	
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Key for DI Strategies Implemented

(F) = Flexible Learning Groups

(C) = Choice

(S) = Shared responsibility

(R) = Respectful tasks