

Louisiana Believes

Distance Learning Support for OpenSciEd Grade 7 Unit 7.3 Metabolic Reactions

This resource is designed to support teachers in implementing distance learning for OpenSciEd Grade 8 Unit 7.3, Unit 4 on the [Louisiana Guide to Piloting OpenSciEd Grade 7](#). It is intended as a supporting document and should be used in conjunction with the [OpenSciEd Unit 7.3 Teacher Edition](#). The resources contained in this document have been adapted from [OpenSciEd](#) with permission under [Creative Commons 4.0 licensing](#).

The OpenSciEd Remote Learning Resources linked below contain detailed information about adapting specific routines to a remote learning environment and a wide variety of options including those for students who do not have internet access:

- [Fostering Productive Norms](#)
- [Anchor Phenomenon Routine](#)
- [Navigation Routine](#)
- [Supporting Discourse](#)
- [Problematizing Routine](#)

This guidance document is considered a “living” document as we believe that teachers and other educators will find ways to improve the document as they use it. Please send feedback to STEM@la.gov so that we may use your input when updating this guide.

Updated November 17, 2020



Norming Language	
Term	Description
Virtual Class Pre-Work	Assignments that students should do prior to virtual class meetings in order to be prepared to engage in discussions, there may be multiple assignments throughout a given lesson
Virtual Class Post-Work	Assignments designed for students to apply learning from virtual class meetings, there may be multiple assignments throughout a given lesson
Virtual Class	Live sessions with students through any digital conferencing platform, teachers may choose to allow students without internet to call in during these sessions and record virtual class sessions to share with those who cannot join
Thinking Deeper Documents	Progress trackers for students to use throughout each lesson to record and revise their thinking about science concepts related to the phenomenon; contain assignments for students to complete before, during, and after virtual classes, discussion boards, and home investigations
Lesson Slideshows	Lesson progression specific to each lesson used to guide student work; used during pre-work, post-work, virtual classes, home investigations, and discussion boards; can be shared with students in their entirety at the beginning of the lesson or broken into small portions and shared as needed
Discussion Boards	Assignments designed for students to share ideas and engage in discussion with one another over time rather than a live environment; students will use their Thinking Deeper Documents to brainstorm prior to submitting; teachers may choose to allow students without internet to text in responses and may screenshot/download and share portions of or full discussions via text (ex. through apps like Remind)
Home Investigations	Investigations with readily available materials designed for students to perform at home; teachers may choose to substitute videos or photos of data collection for students who cannot complete investigations at home

Lesson Set Overview: Lessons [1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#)

Lesson Set 1: Lessons 1-8

Provided Resources Students Will Need	Additional Resources Students Will Need	Additional Materials for Students Without Internet Access
<p>Lesson Slideshows for each lesson: L1, L2, L3, L4, L5, L6, L7, L8</p> <p>Thinking Deeper Documents for each lesson: Lesson 1 TDD, Lesson 2 TDD, Lesson 3 TDD, Lesson 4 TDD, Lesson 5 TDD, Lesson 6 TDD, Lesson 7 TDD, Lesson 8 TDD</p> <p>Additional Documents: Lesson 5 - Reference 3: Do chemical reactions occur in the mouth? Lesson 7: Student Assessment Parts 1 & 2 Lesson 8: Student Assessment Part 3</p>	<p>Lesson 1:</p> <ul style="list-style-type: none"> Driving Question Board assignment Ideas for Investigations Assignment Consensus Model - <i>after completion</i> <p>Lesson 2:</p> <ul style="list-style-type: none"> Discussion Board Assignment <p>Lesson 3:</p> <ul style="list-style-type: none"> Videos/Images of Data Collection - <i>after completed by teacher</i> <p>Lesson 5:</p> <ul style="list-style-type: none"> Ideas for Investigation Board <p>Lesson 7:</p> <ul style="list-style-type: none"> Thinking Deeper Documents from previous lessons Consensus Model Group Models document <p>Lesson 8:</p> <ul style="list-style-type: none"> Thinking Deeper Documents from previous lessons Consensus Model Driving Question Board 	<p>Prior to Lesson:</p> <p>Lesson 1: Anchoring Phenomenon Audio OR transcript of audio, M’Kenna’s Doctor’s Note printed handout</p> <p>Lesson 2: Endoscopy Images (<i>teachers should screenshot relevant images</i>)</p> <p>Lesson 3: Dialysis Tube Set Up Video, Investigation Day 1, Investigation Day 2, Class Prediction Board (<i>option to submit in an alternate way</i>)</p> <p>Lesson 5: Video of Someone Eating</p> <p>Lesson 7: Group Models assignment - <i>option to engage with their group in an alternate way</i></p> <p>Lesson 8: Images from Villi Simulation</p> <p>After Lesson Completion:</p> <p>Virtual Class recordings (Lessons 1, 2, 3, 4, 5, 7, 8)</p> <p>Discussion Boards (Lessons 2)</p> <p>Class Predictions Board (Lesson 3)</p> <p>Group Models document (Lesson 7)</p>

Students should ideally join VIRTUAL CLASS on the following days:

Days 1 & 2 - Lesson 1

Day 4 - Lesson 2

Day 6 - Lesson 3

Day 8 - Lesson 4

Day 10 - Lesson 5

Days 12 & 13 - Lesson 7

Day 15 - Lesson 8

Formative and Summative Assessment Opportunities:

Lessons 2, 3, 4 - Progress Trackers on TDD (option to create a separate assignment to more easily review responses)

Lesson 5 - Exit Ticket

Lesson 7: [Student Assessment Parts 1 & 2](#)

Lesson 8: [Student Assessment Part 3](#)

Lesson Set Overview: Lessons [9](#), [10](#), [11](#), [12](#), [13](#), [14](#), [15](#)

Lesson Set 2: Lessons 9-15										
Provided Resources Students Will Need	Additional Resources Students Will Need	Additional Materials for Students Without Internet Access								
<p>Lesson Slideshows for each lesson:</p> <p>L9, L10, L11, L12, L13, L14, L15</p> <p>Thinking Deeper Documents for each lesson:</p> <p>Lesson 9 TDD, Lesson 10 TDD, Lesson 11 TDD, Lesson 12 TDD, Lesson 13 TDD, Lesson 14 TDD, Lesson 15 TDD</p> <p>Additional Documents:</p> <p>Lesson 15: Brown Bear Hibernation Task or Modified Brown Bear Hibernation Task</p>	<p>Lesson 9:</p> <ul style="list-style-type: none"> Lesson 8 Thinking Deeper Document Driving Question Board <p>Lesson 11:</p> <ul style="list-style-type: none"> Lesson 10 Thinking Deeper Document <p>Lesson 13:</p> <ul style="list-style-type: none"> Consensus Model <p>Lesson 14:</p> <ul style="list-style-type: none"> Lesson 13 TDD Slides or Jamboard for Arguments 	<p>Prior to Lesson:</p> <p>Lesson 10: Fat Burning Lab Protocol</p> <p>Lesson 14: Alternate method for contributing to group arguments if needed</p> <p>After Lesson Completion:</p> <p>Virtual Class Recordings (Lessons 9, 10, 11, 12, 13, 14, 15)</p> <p>Slides or Jamboard for Arguments (Lesson 14)</p>								
<p>Students should ideally join VIRTUAL CLASS on the following days:</p> <table border="0" style="width: 100%; text-align: center;"> <tr> <td>Day 1 - Lesson 9</td> <td>Day 3 - Lesson 10</td> <td>Day 4 - Lesson 11</td> <td>Day 6 - Lesson 12</td> </tr> <tr> <td></td> <td>Day 8 - Lesson 13</td> <td>Day 10 - Lesson 14</td> <td>Day 11 - Lesson 15</td> </tr> </table>			Day 1 - Lesson 9	Day 3 - Lesson 10	Day 4 - Lesson 11	Day 6 - Lesson 12		Day 8 - Lesson 13	Day 10 - Lesson 14	Day 11 - Lesson 15
Day 1 - Lesson 9	Day 3 - Lesson 10	Day 4 - Lesson 11	Day 6 - Lesson 12							
	Day 8 - Lesson 13	Day 10 - Lesson 14	Day 11 - Lesson 15							

Formative and Summative Assessment Opportunities:

Lessons 9, 10, 11, 12, 13, 14 - Progress Trackers on TDD (option to create a separate assignment to more easily review responses)

Lesson 12 - Exit Ticket

Lesson 15: [Brown Bear Hibernation Task](#) or [Modified Brown Bear Hibernation Task](#)

Lesson 1 (3 days) - Anchoring Phenomenon

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Driving Question Board on preferred platform
- Consensus Model - *after completion*
- Ideas for Investigations Assignment - *teacher made*

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- Anchoring Phenomenon [Audio](#) OR [transcript of audio](#)
- [M'Kenna's Doctor's Note](#) printed handout
- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Driving Question Board assignment - *option to submit in an alternate way*
- Ideas for Investigations Assignment - *teacher made*
- Virtual Class Recordings - *after completion*
- Consensus Model - *after completion*
- Driving Question Board - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1
- Day 2

Lesson 1 (3 days) - Anchoring Phenomenon

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-3 (45 min) EXPERIENCE ANCHORING PHENOMENON DISCUSSING THE PHENOMENON CREATE AND SHARE INITIAL MODELS Slides A-E	<p>Prior to Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Make arrangements for student small group discussions if your platform allows. <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Teacher directs students to listen to audio clip of M’Kenna and review M’Kenna’s Doctor’s Note. 2. Students record noticings and wonderings on the chart and map M’Kenna’s symptoms to the body systems. 3. Discuss Notice/Wonder Charts and the Map of M’Kenna’s symptoms about which systems we believe M’Kenna’s symptoms were occurring and what other thoughts and questions arose. 4. Students create an initial model to show how M’Kenna can be experiencing the symptoms in different parts of her body. 5. Students share and discuss their models in small group breakout rooms first (if possible*) then share with the class, noting similarities and differences. <p><i>*if breakout rooms are not possible, whole class discussion only</i></p>	
Part 4 (10 min) FINISH INITIAL MODELS Slide F		<p>VIRTUAL CLASS POST-WORK:</p> <ol style="list-style-type: none"> 1. Finish adding detail to Initial Model based on VIRTUAL CLASS discussions.

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 5 (5 min) TARGET A NORM TO FOCUS ON Slide G	<ol style="list-style-type: none"> 1. Provide students a copy of VIRTUAL CLASS Norms (adapted as needed from Science Classroom Norms) 2. Share platform for Driving Question Board and Ideas for Investigations with students (examples include Google Jamboard, Pinup, shared Google Doc, etc.) 	VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Review the VIRTUAL CLASS Norms and select one that you will focus on in our VIRTUAL CLASS.
Parts 6-8 (40 min) CONSENSUS MODEL IDENTIFY RELATED PHENOMENA DEVELOP INITIAL QUESTIONS Slides H-J	VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Discuss ideas from Initial Models drawing attention to what is agreed upon and what is not and highlighting new ideas as they arise. 2. On chart paper or in a shared electronic document, create a consensus model capturing the students' ideas. 3. Students record and discuss with the class related phenomena. 4. Students record and share initial questions for the Driving Question Board. 5. Teacher begins building Driving Question Board using the platform of their choice (examples include Google Jamboard, Pinup, etc.). 	

Day 3		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 9 (10 min) BUILD THE DRIVING QUESTION BOARD Slide K	<ol style="list-style-type: none"> 1. Revise and organize DQB from VIRTUAL CLASS 2. Reshare the Driving Question Board and share Ideas for Investigation board with students (Examples include Google Jamboard, Pinup, etc.) 	VIRTUAL CLASS POST-WORK <ol style="list-style-type: none"> 1. Add another question to the Driving Question board.
Part 10 (10 min) GENERATE IDEAS FOR INVESTIGATION Slide L	<ol style="list-style-type: none"> 1. Review Ideas for Investigation 	VIRTUAL CLASS POST-WORK <ol style="list-style-type: none"> 1. Record ideas for future investigations; post one of your ideas to the platform your teacher shared with you.

Return to [Lesson Set Overview](#)

Lesson 2 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Discussion Board Assignment - *teacher made*

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Endoscopy Images (*teachers should screenshot relevant images to be provided*)
- Discussion Board Assignment - *teacher made*
- Virtual Class Recordings - *after completion*
- Discussion Board - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 2 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-4 (55 min) NAVIGATING FROM L1 DISCUSSING THE DIGESTIVE SYSTEM STRUCTURES OF THE SYSTEM Slide B ENDOSCOPY IMAGES AND DEBRIEF Slides A-E	Prior to Virtual Class, the teacher should: <ol style="list-style-type: none"> 1. Share Lesson Slideshow with students. 2. Share Thinking Deeper Document with students. VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Teacher guides students to revisit DQB and Ideas for Investigation and students record and share answers to Navigation questions. 2. Teacher guides students to recall parts of the digestive system then make observations about the system and its structures. 3. Students explore and make observations about the endoscopy images in the interactive program. 4. Class discussion to make sense of what students observed. 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 5 (5 min) NAVIGATION INTO DATA ANALYSIS Slide F	<i>If needed, provide video instructions for completing data analysis.</i>	VIRTUAL CLASS POST-WORK: 1. Record answers to Navigation questions.
Part 6 (15 min) FOOD GRAPH DATA ANALYSIS Slide G, H		VIRTUAL CLASS POST-WORK: 1. Complete data analysis of food graphs using I ² strategy.
Part 7 (15 min) PROGRESS TRACKER Slide I		VIRTUAL CLASS POST-WORK: 1. Complete the Progress Tracker.
Part 8 (10 min) INITIAL IDEAS AND NEXT STEPS Slide J	<ol style="list-style-type: none"> 1. Share platform for Discussion board (Examples include Google Jamboard, Pinup, etc.) 2. Review student data analysis and Progress Trackers on TDDs to facilitate discussion in Virtual Class. 3. Review Discussion Board submissions and facilitate discussion as needed. 	DISCUSSION BOARD: <ol style="list-style-type: none"> 1. Answer both Discussion Board questions in the Thinking Deeper Document. 2. Choose the answer to one of the questions to post to the class Discussion board. 3. Turn in Thinking Deeper Document.

Return to [Lesson Set Overview](#)

Lesson 3 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Video or Images of Data Collection - *after completed by teacher*
- Class Prediction Board on preferred platform

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- [Dialysis Tube Set Up Video](#)
- Class Prediction Board - *option to submit in an alternate way*
- [Student Handout](#) for Investigation Day 1
- [Student Handout](#) for Investigation Day 2
- Virtual Class Recordings - *after completion*
- Videos or Images of Data Collection - *after completed by teacher*
- Class Predictions Board - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 3 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-4 (45 min) NAVIGATING FROM L2 PLANNING AND ASSESSING THE INVESTIGATION CONDUCTING THE INVESTIGATION MAKING PREDICTIONS ABOUT THE DIALYSIS TUBE RESULTS Slides A-G	Prior to the Virtual Class, the teacher should: <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Share platform for Class Predictions board. VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Class discussion of Discussion Board ideas from the end of L2. 2. Class discussion on what could be happening to the food molecules as they pass through the small intestine of a healthy person. 3. Class discussion about how this question could be investigated. 4. Teacher plays Dialysis Tube Setup video. 5. Using chart paper or shared electronic document, teacher creates a consensus model with the class of the set up and what each component of the dialysis tube investigation represents. 6. Teacher demonstrates conducting the investigation while students record in their Thinking Deeper Document. 7. Students make predictions about the results and paste one of their predictions onto the Class Predictions board. 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 5 (3 min) NAVIGATION Slide H	1. Reshare Class Predictions board with students.	VIRTUAL CLASS POST-WORK: 1. Revisit Class Predictions board and own predictions.
Part 6 (15 min) DATA OBSERVATIONS Slide I	1. Provide students with a video or photos of data collection for Investigation Part 2.	VIRTUAL CLASS POST-WORK: 1. Record noticings and wonderings of the data collection provided by teacher of the investigation. 2. Record data for Dialysis Tube Investigation Part 2
Part 7 (10 min) DATA ANALYSIS Slides J, K		VIRTUAL CLASS POST-WORK: 1. Complete the analysis of the data.
Part 8 (8 min) MOLECULAR REPRESENTATIONS Slide L		VIRTUAL CLASS POST-WORK: 1. Record noticings and wonderings of the molecular structures of starch and glucose.
Part 9 (8 min) PROGRESS TRACKER Slide M	1. Review students' Progress Trackers on TDDs and provide feedback as needed individually or during Virtual Class.	VIRTUAL CLASS POST-WORK: 1. Complete the Progress Tracker. 2. Submit Thinking Deeper Document.

Return to [Lesson Set Overview](#)

Lesson 4 (1 day) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Virtual Class Recording - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 4 (1 day) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 1-5 (35 min) NAVIGATION FOOD GRAPH DATA ANALYSIS BUILDING UNDERSTANDING DISCUSSION POOP DATA STARCH AND FIBER MOLECULES Slides A-F	Prior to the Virtual Class, the teacher should: <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Let students know that they will need the previous lesson's TDD. VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Direct students to refer to L3 Thinking Deeper Document and discuss Dialysis Tube Investigation results. 2. Teacher guides students through analyzing the food graph data using the 1st strategy. 3. Students examine patterns in the complex carbohydrate data and help them connect that to what they know about systems. 4. Students make predictions about which food molecules would be found in poop. 5. Class discussion about Poop Data. 6. Students view and compare food molecules of starch and fiber and Stop and Jot what they notice. 7. Class discussion to compare the food molecules. 	
Part 6 (10 min) PROGRESS TRACKER Slide G		VIRTUAL CLASS POST-WORK: <ol style="list-style-type: none"> 1. Complete Progress Trackers.

Return to [Lesson Set Overview](#)

Lesson 5 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- [Lesson 5 - Reference 3: Do chemical reactions occur in the mouth?](#) (linked in Slideshow)
- Ideas for Investigation Board on preferred platform

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- [Video of Someone Eating](#)
- [Lesson 5 - Reference 3: Do chemical reactions occur in the mouth?](#)
- Ideas for Investigation Board - *alternate way to contribute*
- Ideas for Investigation - *after completion*
- Virtual Class Recording - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 2

Lesson 5 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 1 (7 min) NAVIGATION Slide A	<ol style="list-style-type: none"> 1. Share Lesson Slideshow with students. 2. Share Thinking Deeper Document with students. 	VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Answer Navigation questions.
Part 2 (9 min) OBSERVATIONS ABOUT EATING COMPLEX CARBS Slides B, C, D, E	<ol style="list-style-type: none"> 1. Share platform for Ideas for Investigation board. 	VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Identify an idea from our Ideas for Investigation board that could help. 2. Make a prediction about what happens to complex carbohydrates in the mouth. 3. Eat a cracker or watch video of person eating and make observations about what is happening.
Part 3 (12 min) DATA ANALYSIS Slide F		VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Analyze the data of food molecules in the mouth.
Part 4 (10 min) WHAT'S SPIT? Slide G		VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Read What's Spit? And answer the questions about the article.

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 5-10 (45 min) NAVIGATION DISCUSSION PATTERNS IN FOOD MOLECULES PLAN AND CONDUCT INVESTIGATION BUILDING UNDERSTANDING EXIT TICKET Slides H-O	Prior to the Virtual Class, the teacher should: <ol style="list-style-type: none"> 1. Set up to demonstrate the investigation. VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Teacher leads a class discussion about the Pre-Work. 2. Students record observations about food molecule structures and connect it to what is happening in the mouth. 3. Students plan an investigation to test for chemical reactions in the mouth. 4. The teacher conducts a demonstration of the investigation while students record their findings. 5. Class discussion about whether or not chemical reactions are happening in the mouth. 6. Students complete Exit Ticket. 	

Return to [Lesson Set Overview](#)

Lesson 6 (1 day) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- None

Lesson 6 (1 day) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 1 (5 min) NAVIGATION Slides A, B	<ol style="list-style-type: none"> 1. Share Lesson Slideshow with students. 2. Share Thinking Deeper Document with students. 	VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Answer the Navigation questions.
Part 2 (10 min) ANALYZING FOOD MOLECULE DATA Slides C, D, E, F, G, H, I		VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Analyze the food molecule data by indicating whether each food molecule increases, decreases, or stays the same from one location to the next.
Part 3 (7 min) PATTERNS IN FOOD MOLECULES Slide J		VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Identify patterns in food molecules and what those patterns indicate.
Part 4 (3 min) NAVIGATION Slide K		VIRTUAL CLASS PRE-WORK <ol style="list-style-type: none"> 1. Answer the navigation question.

Return to [Lesson Set Overview](#)

Lesson 7 (3 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Thinking Deeper Documents from previous lessons
- Consensus Model
- [Student Assessment Parts 1 & 2](#)
- Group Models document on preferred platform

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Thinking Deeper Documents from previous lessons
- Consensus Model
- Group Models assignment - *option to engage with their group in an alternate way*
- [Student Assessment Parts 1 & 2](#)
- Virtual Class Recordings - *after completion*
- Group Models document - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1
- Day 2

Lesson 7 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-5 (55 min) NAVIGATION REFLECTION BUILDING UNDERSTANDING DISCUSSION WHAT CAN WE EXPLAIN NOW? GOTTA HAVE IT CHECKLIST SMALL GROUP MODELS Slides A-E	<p>Prior to the Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Reshare Consensus Model. 3. Arrange for students to work in small groups via break-out rooms if the platform allows. 4. Provide link to platform for students to post their Group Models (Jamboard, Slides, etc.). <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Teacher directs students to open L3 Thinking Deeper Document. 2. Students answer Navigation Reflection Questions. 3. Teacher facilitates a discussion to build understanding of what is happening to food molecules, what the patterns in food molecules indicate, and how food molecule data relates to what is going on with M’Kenna. 4. Students compile Progress Trackers and previous models into one revised model. 5. Class creates the Gotta Have It Checklist together. 6. Teacher assigns groups to work collaboratively on a model that shows the function of a healthy digestive system. NOTE: If break-out rooms are not available, students can work on the models independently. 7. Students create and post group models to the Group Models board (using format of choice: Jamboard, Slides, etc.) 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 6-9 (45 min) VIRTUAL GALLERY WALK CLASSROOM CONSENSUS MODEL PROGRESS TRACKER & DISCUSSION NAVIGATE TO STUDENT ASSESSMENT Slides F-K	VIRTUAL CLASS: 1. Teacher directs students to view the models created by other groups. 2. Students record one thing they can take from the model and leave a comment or sticky with one constructive criticism for at least 2 other groups. 3. Students review their models and notes and meet again in small groups to discuss what they would keep or change for the Class Consensus Model. 4. Teacher facilitates discussion to create the Class Consensus Model; teacher will create on chart paper or in a shared electronic document. 5. Students complete Progress Tracker and debrief their understanding as a class. 6. Teacher navigates students to Post-Work, previewing the assessment and directions and addressing any questions students may have before ending virtual class.	

Day 3		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 10 & 11 (43 min) STUDENT ASSESSMENT PARTS 1 AND 2 NAVIGATION TO DQB	<i>Teacher may choose to provide video instructions for each part of assessment</i> 1. Share Student Assessment Parts 1 & 2	VIRTUAL CLASS POST-WORK 1. Complete Student Assessment Parts 1 and 2. 2. Post your question from the DQB with its answer to our DQB.

Return to [Lesson Set Overview](#)

Lesson 8 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- [Student Assessment Part 3](#)
- Thinking Deeper Documents from previous lessons
- Consensus Model
- Driving Question Board

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- [Student Assessment Part 3](#)
- Thinking Deeper Documents from previous lessons
- Consensus Model
- Driving Question Board
- Images from [Villi Simulation](#)
- Virtual Class Recordings - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 8 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-5 (50 min) NAVIGATION - ASSESSMENT DEBRIEF VISUAL MAP OF M'KENNA'S EXAMPLE TO HUMAN BODY EXAMINING STRUCTURE OF VILLI EXAMINING FUNCTION OF VILLI CONSENSUS BUILDING DISCUSSION Slides A-G	Prior to the Virtual Class, the teacher should: 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Review DQB and Student Assessments Parts 1 & 2. VIRTUAL CLASS: 1. Teacher facilitates discussion to debrief the assessment Parts 1 and 2 and asks students to identify what evidence is still needed to be able to make a claim. 2. Class discussion to connect M'Kenna's example to the human body structural organization. 3. Students complete a Notice/Wonder Chart for the small intestine and the lining of the small intestine. 4. Teacher introduces the term "villi". 5. Students will complete a computer simulation to determine the function of villi. 6. Building consensus discussion about the small intestine, the structure and function of villi, the connection to M'Kenna's small intestine.	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 6-8 (30 min) PROGRESS TRACKER Slide H STUDENT ASSESSMENT PART 3 Slide I REVISIT DQB Slide J	<i>Teacher may wish to record video instructions for Arguing from Evidence Diagnostic Task.</i> 1. Share Student Assessment Part 3 .	VIRTUAL CLASS POST-WORK: 1. Complete the Progress Tracker. 2. Construct an argument from evidence for the diagnosis that best matches M’Kenna’s symptoms (Student Assessment Part 3). 3. Identify three questions from the DQB that we have found answers to and provide the answers.

Return to [Lesson Set Overview](#)

Lesson 9 (1 day) - Problematizing

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Lesson 8 Thinking Deeper Document
- Driving Question Board

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Lesson 8 Thinking Deeper Document
- Driving Question Board
- Virtual Class Recordings - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 9 (1 day) - Problematizing

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-6 (45 min) NAVIGATION REVISING THE DRIVING QUESTION BOARD REVISIT M'KENNA'S DOCTOR'S NOTE PROBLEMATIZE M'KENNA'S SYMPTOMS NAVIGATION PROGRESS TRACKER Slides A-G	<p>Prior to Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Insert a green dot on the DQB for students to copy and paste. 3. Arrange for students to work with a partner via break-out rooms if the platform allows. <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Teacher has students access their L8 Thinking Deeper Documents and refer to the last section. 2. Teacher shares the link for DQB and guides students to identify questions that have been answered with a green dot. 3. Class discussion about which questions can be answered (where the green dots are); students share out evidence for answers. 4. Revise the Driving Question Board. 5. Students revisit M'Kenna's doctor's note and the systems in which her symptoms were occurring. 6. Students work with a partner in breakout rooms to discuss and record which symptoms are connected to what they have figured out and which symptoms have no connection yet (Note: if breakout rooms are not available, this activity can also be done independently) 7. Teacher guides students to problematize M'Kenna's symptoms. 8. Students stop and jot what they are wondering about now. 9. Students complete a Progress Tracker. 	

Return to [Lesson Set Overview](#)

Lesson 10 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Virtual Class Recordings - *after completion*
- [Fat Burning Lab Protocol](#)

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 2

Lesson 10 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 1 (5 min) NAVIGATION Slides A, B	<ol style="list-style-type: none"> 1. Share Lesson Slideshow with students. 2. Share Thinking Deeper Document with students. 	VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Complete the Stop and Jots about M’Kenna’s symptoms.
Part 2 (10 min) PATTERNS IN M’KENNA’S WEIGHT Slides C, D		VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Look at the line graph for M’Kenna’s height and weight and record observations and what they might mean. 2. Answer questions to make sense of the data.
Part 3 (25 min) WHERE DOES FAT GO? Slides E1-H		VIRTUAL CLASS PRE-WORK: <ol style="list-style-type: none"> 1. Observe the images of weight loss patterns in human and animal. 2. Answer the questions to make sense of what is observed. 3. Reflect on where fat goes when someone loses weight. 4. Read the article “Kids need more fat than adults” twice. 5. Answer the questions about the article.

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 4-8 (60 min) BUILDING UNDERSTANDING INTRO BURNING FAT INVESTIGATION ANALYZE NUTRITION LABELS PREPARE FOR AND CONDUCT BURNING FAT INVESTIGATION DEMONSTRATION PROGRESS TRACKER Slides I-N	Prior to Virtual Class, the teacher should: <ol style="list-style-type: none"> 1. Set up for demonstration of the Burning Fat Investigation. 2. Arrange for students to work with a partner via break-out rooms if the platform allows. VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Class discussion around M’Kenna’s weight patterns and where fat goes when a person loses weight. 2. Students discuss and determine how the question could be investigated. 3. Students indicate which types of fat they think should be burned. 4. Students analyze nutrition labels in pairs (<i>teacher can use breakout rooms for pair-work; if breakout rooms are not available, this activity can also be done independently</i>). 5. Teacher demonstrates what happens when a wick is burned; students record observational data. 6. Teacher demonstrates burning vegetable fat and animal fat; students record observational data. 7. Students complete Progress Trackers to explain what they have figured out about what happens to fat when it is burned. 	
Part 9 (10 min) MAKING SENSE Slide O		VIRTUAL CLASS POST-WORK: <ol style="list-style-type: none"> 1. Complete the Making Sense of the Results questions.

Return to [Lesson Set Overview](#)

Lesson 11 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Lesson 10 Thinking Deeper Document

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Lesson 10 Thinking Deeper Document
- Virtual Class Recordings - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 11 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-6 (60 min) NAVIGATION PLAN AND CONDUCT DEMONSTRATION TO CAPTURE PRODUCTS BUILDING UNDERSTANDING DATA ANALYSIS PLAN AND CONDUCT DEMONSTRATION TO MEASURE CHANGING GAS CONCENTRATIONS SENSE-MAKING Slides A-K	Prior to the Virtual Class, the teacher should: <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Set up to demonstrate capturing products and measuring changing gas concentrations. 3. Arrange for students to work in small groups via break-out rooms if the platform allows. VIRTUAL CLASS: <ol style="list-style-type: none"> 1. Teacher directs students to open the Lesson 10 Thinking Deeper Document and reference their Making Sense of the Results questions. 2. Students choose one question to discuss as a group in breakout rooms (<i>if breakout rooms are unavailable, this can also be completed as a whole class discussion</i>). 3. Students identify and record how they think the investigation could be redesigned. 4. Teacher guides students through planning and preparing to watch a demonstration to capture products. 5. Students record data collected in demonstration. 6. Class discussion to build understanding of the results from the open and closed systems. 7. Students observe and ask questions about the data of substances in the air. 8. Teacher guides students through planning and preparing to watch a demonstration to measure the gases produced by burning fat. 9. Students record data collected in demonstration. 10. Students independently answer questions to make sense of the results. 11. Class sense-making discussion about the results of the demonstrations. 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 7 (5 min) ANALYZE NUTRITION LABELS Slide L		VIRTUAL CLASS POST-WORK: 1. Answer the questions based on analysis of the nutrition labels.
Part 8 (8 min) COMPARE CARBON DIOXIDE AND WATER TO FOOD MOLECULES Slides M, N		VIRTUAL CLASS POST-WORK: 1. Compare the water and carbon dioxide molecules to the food molecules. 2. Provide an explanation for where the molecules in carbon dioxide and water are coming from .
Part 9 (7 min) PROGRESS TRACKER Slide O	1. Review student responses to Progress Trackers on TDD. 2. Provide feedback as needed individually or in the next Virtual Class.	VIRTUAL CLASS POST-WORK: 1. Complete the Progress Tracker.
Part 10 (5 min) NAVIGATION Slide P		VIRTUAL CLASS POST-WORK: 1. Answer the three questions to problematize where to go next.

Return to [Lesson Set Overview](#)

Lesson 12 (2 days) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Virtual Class Recordings - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 12 (2 days) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-5 (55 min) NAVIGATION BTB INVESTIGATION BUILDING UNDERSTANDING FOLLOW THE PATH OF AIR IN THE LUNGS ANALYZE OXYGEN AND CARBON DIOXIDE LEVELS IN BLOOD Slides A-J	<p>Prior to the Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Set up to demonstrate BTB investigation. 3. Arrange for students to work in small groups via break-out rooms if the platform allows. <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Answer questions to navigate to the lesson. 2. Class discussion to predict whether the chemical reaction is happening inside our bodies and how the class could investigate. 3. Teacher demonstrates the BTB investigation and students record data. 4. Students answer questions independently then engage in a class discussion to build understanding of the data. 5. Make observations about the path that air takes through the lungs. 6. Compare molecular models of glucose and the air we breathe to determine if molecules from the air we breathe can enter the blood from the lungs. 7. Analyze data about oxygen and carbon dioxide levels in the blood with a partner (<i>if breakout rooms are unavailable, this can also be done independently</i>). 8. Students independently complete the Exit Ticket 9. With a partner, discuss cells' use of energy (<i>if breakout rooms are unavailable, this can also be done as a whole class discussion</i>). 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 6 (7 min) NAVIGATION Slide K		VIRTUAL CLASS POST-WORK: 1. Answer the navigation questions based on your understanding from the last virtual class.
Part 7 (20 min) INTERPRET ACTIVITY DATA Slide L, M, N	1. Option to create a separate assignment for students to turn in their questions about the graph if reviewing their TDDs is not an option. 2. Review work on graph analysis and provide feedback individually or in the next Virtual Class as needed.	VIRTUAL CLASS POST-WORK: 1. Answer the questions about the pie graph titled <i>Total proportion of oxygen consumption by cells in these organs while at rest (%)</i> . 2. Analyze the line graph titled <i>Glucose levels in the blood over 24 hours</i> using the I^2 strategy. 3. Answer the questions using the information from the line graph.
Part 8 (10 min) PROGRESS TRACKER Slide O	1. Review student responses to Progress Trackers on TDD. 2. Provide feedback as needed individually or in the next Virtual Class.	VIRTUAL CLASS POST-WORK: 1. Complete the Progress Tracker.
Part 9 (5 min) NAVIGATION Slide P		VIRTUAL CLASS POST-WORK: 1. Revise what you know about M’Kenna’s symptoms and systems with the information from lessons 10-12.

Return to [Lesson Set Overview](#)

Lesson 13 (2 days) - Putting Pieces Together

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Consensus Model

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Virtual Class Recordings - *after completion*
- Consensus Model - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 13 (2 days) - Putting Pieces Together

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-5 (60 min) NAVIGATION SMALL GROUP MODELS SMALL GROUP MODEL COMPARISON CONSENSUS MODEL CONNECTING TO M’KENNA’S OTHER SYMPTOMS Slides A-G	<p>Prior to the Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Share link to platform for the Consensus Model (examples include Google Jamboard, Pinup, etc.). 3. Arrange for students to work in small groups via break-out rooms if the platform allows. <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Class discussion around the Progress Tracker from L12. 2. Identify one important piece of information on how our bodies use food for energy and capture it in the Gotta-Have-It Checklist. 3. Class discusses how a healthy body uses food for energy and students add to their Gotta-Have-It Checklists. 4. Students use Gotta-Have-It Checklists to develop a model in small groups (<i>if breakout rooms are unavailable, this can also be done independently</i>) 5. Small groups will pair up and compare models (<i>if breakout rooms are unavailable, this can also be done as a whole class discussion</i>) 6. Create a consensus model based on student responses and discussion. 7. Turn and talk about how what they’ve learned connects to M’Kenna (<i>if breakout rooms are unavailable, this can also be done as a whole class discussion</i>). 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 6 (7 min) NAVIGATION Slide H		VIRTUAL CLASS POST-WORK: 1. Answer the navigation questions based on understanding from the last virtual class.
Part 7 (15 min) CONNECT WHAT WE'VE FIGURED OUT TO M'KENNA'S OTHER SYMPTOMS Slides I, J		VIRTUAL CLASS POST-WORK: 1. Observe the fat and glucose molecules. 2. Record thoughts in the Notice/Wonder Chart. 3. Summarize understanding of why M'Kenna was losing weight.
Part 8 (13 min) DEVELOP INITIAL EXPLANATIONS FOR M'KENNA'S OTHER SYMPTOMS Slide K, L		VIRTUAL CLASS POST-WORK: 1. Identify which of M'Kenna's other symptoms could be connected to what we have figured out. 2. Predict how a shortage of food entering M'Kenna's bloodstream could be connected to the symptoms in different systems.
Part 9 (10 min) PROGRESS TRACKER Slide M	1. Review student responses to Progress Trackers on TDD. 2. Provide feedback as needed individually or in the next Virtual Class.	VIRTUAL CLASS POST-WORK: 1. Complete the Progress Tracker.
Part 10 (5 min) HOW IS M'KENNA NOW? Slide N		VIRTUAL CLASS POST-WORK: 1. Read the text about who M'Kenna is and how she is doing now.

Return to [Lesson Set Overview](#)

Lesson 14 (1 day) - Investigation

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- Lesson Slideshow
- Thinking Deeper Document
- Lesson 13 TDD
- Link to Slides or Jamboard for Arguments

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- Lesson Slideshow
- Thinking Deeper Document
- Lesson 13 TDD
- Virtual Class Recordings - *after completion*
- Slides or Jamboard for Arguments - *after completion*

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 14 (1 day) - Investigation

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-5 (45 min) NAVIGATION RESEARCH ABOUT YOUR ANIMAL GALLERY SCROLL TO COMPARE ACROSS ORGANISMS CONSENSUS DISCUSSION ABOUT OUR ANIMALS PROGRESS TRACKER NAVIGATION Slides A-H	<p>Prior to the Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. 2. Share link to platform for the Group Arguments from Evidence (ex. Google Jamboard, Google Slides, etc.) 3. Arrange for students to work in small groups via break-out rooms if the platform allows. <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Class discussion around what was figured out about how the stuff inside our bodies works together to make us feel the way we do and what we learned about M’Kenna. (have students reference Lesson 13 TDD as needed.) 2. Answer two Stop and Jot questions about how animals’ bodies work and discuss with a partner. 3. Conduct research about an animal of their choice. 4. Work together in groups to construct arguments from evidence for two questions (<i>if breakout rooms are unavailable, this can also be done independently</i>) 5. Groups post arguments to designated slides or Jamboard pages. 6. Reviews rubric and peer feedback guidelines. 7. Scroll through arguments and provide feedback to other groups. 8. Groups adjust their arguments using feedback received. 9. Students self-assess how they gave and received feedback in the Gallery Scroll. 10. Class discussion about the animals. 11. Complete Progress Tracker to show what they have figured out about whether animals do similar chemical reactions to get energy from food. 12. Class revisits the DQB and marks questions according to whether they have been answered or not. 13. Students choose three questions the class identified as answered and record the question with the answer. 	

Return to [Lesson Set Overview](#)

Lesson 15 (2 days) - Putting Pieces Together

In this **Lesson**, students will need the following materials to appropriately engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Driving Question Board
- [Brown Bear Hibernation Task](#) or [Modified Brown Bear Hibernation Task](#)

In this **Lesson**, students who don't have home internet need the following print-outs or files to best engage in learning:

- [Lesson Slideshow](#)
- [Thinking Deeper Document](#)
- Driving Question Board
- Virtual Class Recordings - *after completion*
- [Brown Bear Hibernation Task](#) or [Modified Brown Bear Hibernation Task](#)

In this **Lesson**, students should join virtual classes on the following days to engage in learning:

- Day 1

Lesson 15 (2 days) - Putting Pieces Together

Day 1		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Parts 1-3 (52 min) NAVIGATION PROGRESS TRACKER QUICK WRITE: REFLECT ON OUR EXPERIENCES Slides A-D	<p>Prior to the Virtual Class, the teacher should:</p> <ol style="list-style-type: none"> 1. Share Lesson Slideshow and Thinking Deeper Document with students. <p>VIRTUAL CLASS:</p> <ol style="list-style-type: none"> 1. Partners compare questions and answers from the DQB that they identified in the last lesson. 2. Share out with the whole class one question they discussed with their partner and its answer. 3. Update Progress Trackers with questions and answers heard in class that they can also now answer. 4. Reflect on the unit. 5. Teacher facilitates discussion about the student's reflections. 6. Explain assessment task. 	

Day 2		
Lesson Components	Distance Learning Plan	
	Teacher	Student
Part 5 (37 min) DEMONSTRATE UNDERSTANDING ON AN ASSESSMENT TASK Slide E	1. Share Brown Bear Hibernation Task or Modified Brown Bear Hibernation Task with students.	VIRTUAL CLASS POST-WORK 1. Complete the Brown Bear Hibernation Task

Return to [Lesson Set Overview](#)