Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 1
School Year: 2023-24		Subject: SCIENCE 7	
Monday	**NO SCHOOL**		
Tuesday	Notes: Materials: classroom, planners	Objective: Students will be introduced to science 7 classroom and general course topics Student will be introduced to student planner pages Lesson Overview: Roll, seating, materials in room Wrap-up: Student discussion of what was discussed	Academic Standards: NONE
Wednesday	Notes: science word search, instructions for log-in on board.	Objective: Students will receive school computers, Class will discuss rules and expectations, science word search for students finished with computer checkout and log-in Lesson Overview: Opening: Students will lead discussion on what was learned the previous day. Students will be called out alphabetically to get computers. Students will practice logging in and finding appropriate school websites. Wrap up: Student-led discussion of what was discussed today	Academic Standards: NONE
Thursday	Notes: Materials; rights/rules/responsibilities worksheet	Objective: Students will understand the similarities and differences between rules, rights and responsibilities and expectations. Lesson Overview: Students will lead discussion on what was learned the previous day. Class discussion on reasons for rules. What are the expectations for children's rights? What are the responsibilities associated with these rights? Do matching worksheet, discuss how class rules relate to rights and responsibilities of young adults. Wrap up: Student-led discussion of what was discussed today	Academic Standards: NONE
Friday	Notes: Materials, Canvas quiz	Objective: Students will demonstrate understanding of what was discussed this week. Lesson Overview: Students will lead discussion on what was learned the previous day. Review of Class rules, rights and responsibilities. Discussion of how this first week went for everyone. Wrap up: Student-led discussion of what was discussed today	Academic Standards: NONE

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 2
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: chess boards	Objective: Students will demonstrate an understanding of the ways chess pieces can move. Students will articulate the reasons behind learning and playing chess Lesson Overview: Students set up chessboards guided by teacher. Chess rules, moves video, Practice exercises. Wrap-up Student-led discussion of how chess pieces move and reasons for chess	Academic Standards: NONE
Tuesday	Notes: Chess boards, canvas quiz	Objective: Students will demonstrate understanding of basic chess through Canvas quiz and practice exercises Lesson Overview: Introduction: student led discussion of chess piece moves and reasons for playing chess. Introduction of openings video, practice games. Wrap-up: student-led discussion of moves and reasons to play chess	Academic Standards: NONE
Wednesday	Notes: Canvas pre-test	Objective: Students will demonstrate pre-test knowledge of science topics to be covered in class Lesson Overview: Introduction: student led-discussion on what they expect to learn in life science this year. Part one of pre-test. Wrap-up: student-led discussion of some of the things they felt were interesting in the questions in part 1	Academic Standards: NONE
Thursday	Notes: Canvas pre-test	Objective: Students will demonstrate pre-test knowledge of science topics to be covered in class Lesson Overview: Introduction: student led-discussion on what they now expect to learn in life science this year. Part two of pre-test. Wrap-up: student-led discussion of some of the things they felt were interesting in the questions in part 2	Academic Standards: NONE
Friday		**NO SCHOOL**	Academic Standards: NONE

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 3
School Year: 2023-24		Subject: SCIENCE 7	
Monday		Objective: **NO SCHOOL**	
Tuesday	Notes: Canvas discussion	Objective: Students will demonstrate the ability to participate in Canvas discussions. Lesson Overview: Teacher led discussion on personal introduction. Students use Canvas to introduce themselves and respond to introductions of others Wrap-up: student led discussion on surprising facts they learned about others	Academic Standards: NONE
Wednesday	Notes: Canvas assignment	Objective: Students will demonstrate their ability to use Canvas to submit work Lesson Overview: Introduction: student-led discussion on use of Canvas last year. Pros and cons. Demonstrate what is available on Canvas. Students submit written Canvas assignment Wrap-up: student led discussion	Academic Standards: NONE
Thursday	Notes: Canvas quiz	Objective: Students will demonstrate their knowledge of Canvas to take short quizzes. Students will demonstrate their ability to sue Chat GPT Lesson Overview: Introduction: student led discussion about Chat GPT. Examples and instructions on student use of Chatbot. Wrap-up: student led discussion on Chat GPT	Academic Standards: NONE
Friday	Notes: Canvas quiz	Objective: Students will demonstrate knowledge of concepts presented this week. Lesson Overview: Introduction: student-led discussion on weekly concepts. Weekly quiz, chess in free time	Academic Standards: NONE

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 4
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Restating quiz	Objective: Students will demonstrate the ability to restate the questions when answering prompts Lesson Overview: short quiz on restating question, discussion and lesson on restating questions, Canvas assignment. Wrap-up: student-led discussion	Academic Standards:
Tuesday	Notes: Canvas	Objective: Students will demonstrate the ability to restate the questions when answering prompts Lesson Overview: intro: Student-led discussion. Practice restating the question, Chat GPT prompt demonstration. Canvas quiz Wrap-up student-let discussion	Academic Standards:
Wednesday	Notes: Canvas lesson, video	Objective: Students will demonstrate the ability to prepare for learning from a video and obtaining information from a video Lesson Overview: intro: Student-let discussion on restating the questions in class. Instruction on learning from a video. Watch video and take notes. Canvas assignment. Wrap-up student-let discussion Student-led discussion on how learning from You-tube videos and be helpful.	Academic Standards:
Thursday	Notes: Canvas lesson, Chat GPT	Objective: Students will demonstrate the ability to obtain information from videos. Lesson Overview: intro: Student-led discussion on learning from videos. Review and demonstration of use of Chat GPT to obtain information. Canvas quiz, Canvas discussion Wrap-up student-let discussion on use of Chat GPT and how they feel about the information they learned today.	Academic Standards:
Friday	Notes: Friday quiz, Canvas	Objective: Students will demonstrate their understanding of concepts presented this week. Grade check. Lesson Overview: intro: Student-led discussion Wrap-up student-let discussion using videos and use of Chat GPT	Academic Standards:

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 5
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Canvas assignment	Objective: Students will demonstrate an understanding of the differences and similarities of paraphrasing and plagiarism Lesson Overview: video, lesson on plagiarism. Practice activity of gathering information and paraphrasing that information Wrap-up: student-led discussion on examples of what is/is not plagiarism	Academic Standards: 7.W.7
Tuesday	Notes: Canvas quiz	Objective: Students will demonstrate an understanding of the differences and similarities of paraphrasing and plagiarism Lesson Overview: intro: Student-led discussion on plagiarism. Review lesson, Canvas quiz Wrap-up student-let discussion	Academic Standards: 7.W.7 7.SL.4
Wednesday	Notes: Canvas assignment	Objective: Students will explore different methods of researching for reports Lesson Overview: intro: Student-led discussion on experiences with doing reports in the past. Instructions on research methods, student research over 2 days. Wrap-up student-let discussion on things they learned about their animals today	Academic Standards: 7.W.7 7.W.8 7.W.9
Thursday	Notes: Assignment cont. Friday quiz	Objective: Students will finalize animal research Lesson Overview: intro: Student-led discussion on their progress with the research so far. Wrap-up: Weekly quiz, no class tomorrow	Academic Standards: 7.SL.4
Friday	Notes:	Objective: **NO SCHOOL** **GRADE CHECK FOR FIRST 1/8TH**	Academic Standards:

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 6
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Labor Day	Labor day, no school	Academic Standards:
Tuesday	Notes: Student presentations of reports	Objective: Students will demonstrate knowledge of their chosen animal through class presentations Lesson Overview: Student Power Point presentations	Academic Standards: 7.SL.4 7.SL.5 7.SL.6
Wednesday	Notes: Finish presentations Begin Logical thinking.	Objective: Students will be able to solve simple matrix logic problems Lesson Overview: intro: Student-led discussion on experiences with doing reports in the past. Instructions on research methods, student research over 2 days. Wrap-up student-let discussion on things they learned about their animals to	Academic Standards: 7.SL.4 7.SL.5 7.SL.6
Thursday	Notes: Logic puzzle packets cont.	Objective: Students will be able to solve simple matrix logic problems Lesson Overview: intro: review Matrix logic or logic lesson depending on class size and length of student presentations Wednesday	Academic Standards:
Friday	Notes: NEXIS Collation preseatation	Objective: Lesson Overview: Undetermined. NEXIS has their own curriculum	Academic Standards:

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 7
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Branches of science Canvas assignment	Objective: Students will be able to classify science subjects by branch Lesson Overview: video, lesson on branches of science Wrap-up: Canvas written assignment	Academic Standards: U1
Tuesday	Notes: review branches Canvas quiz	Objective: Students will be able to classify jobs pathways according to science branch Lesson Overview: intro: Student-led discussion on types of science Review lesson, Canvas quiz Wrap-up student-let discussion	Academic Standards: U1
Wednesday	Notes: patterns Canvas assignment	Objective: Students will explore different types of patterning in science Lesson Overview: intro: Student-led discussion on patterns displayed on tables.	Academic Standards: U1
Thursday	Notes: review patterns types Patterns quiz	Objective: Students will identify pattern types in the natural world Lesson Overview: intro: Student-led discussion on their progress with the research so far. Wrap-up: Canvas quiz	Academic Standards: U1
Friday	Notes: Friday quiz	Objective: Students will demonstrate knowledge of weekly concepts and understanding of current grade and missing work Lesson Overview: Student grade checks, missing work check and weekly wrap-up	Academic Standards:

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 8
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Camouflage Canvas assignment	Objective: Students will be able to use visual patterning to classify camouflage types Lesson Overview: video, lesson on camouflage Wrap-up: Canvas written assignment	Academic Standards: 6.L2U1.13 Cross-cutting concepts: patterns
Tuesday	Notes: review visual patterns: camouflage Canvas quiz	Objective: Students will be able to classify examples of camouflage fro examples in nature Lesson Overview: intro: Student-led discussion on types of camouflage Review lesson, Canvas quiz Wrap-up student-led discussion	Academic Standards: 6.L2U1.13 Cross-cutting concepts: patterns
Wednesday	Intro skeletons Bill Nye video	Objective: Students will be able to state the uses for the skeleton Lesson Overview: intro: observe class skeleton Watch Bill Nye video and answer questions	Academic Standards: Cross-cutting concepts: structure and function
Thursday	Notes: review skeletons Construct skeleton	Objective: Students will create a skeleton and differentiate between axial and appendicular skeleton Lesson Overview: intro: Student-led discussion on their progress with the research so far. Wrap-up: finish creating skeleton	Academic Standards: Cross-cutting concepts: structure and function
Friday	Notes: Friday quiz	Objective: Students will demonstrate knowledge of weekly concepts and understanding of current grade and missing work Lesson Overview: Student grade checks, missing work check and weekly wrap-up	Academic Standards:

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 9
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Skeleton Lable paper skeletons	Objective: Students will be able to identify major skeletal bones Lesson Overview: video, lesson on skeletons Wrap-up: Canvas written assignment	Academic Standards: Cross-cutting concepts: structure and function
Tuesday	Notes: review skeletons, models Canvas quiz	Objective: Students will be able to name bones on skeleton models Lesson Overview: intro: build plastic skeleton models Review lesson, Canvas quiz Wrap-up student-led discussion	Academic Standards: Cross-cutting concepts: structure and function
Wednesday	Leaves	Objective: Students will collect leaves for dichotomous key practice Lesson Overview: intro: observe class skeleton Watch Bill Nye video and answer questions	Academic Standards: Cross-cutting concepts: patterns
Thursday	Notes: review leaves	Objective: Students will preserve and press leaves, canvas quiz Lesson Overview: intro: sort leaves by similarities Wrap-up: finish pressing leaves	Academic Standards: Cross-cutting concepts: structure and function
Friday	Notes: Friday quiz	Objective: Students will demonstrate knowledge of weekly concepts and understanding of current grade and missing work Lesson Overview: Student grade checks, missing work check and weekly wrap-up	Academic Standards:

Name: GODWIN		Grading Quarter: 1	Week Beginning: WEEK 10
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Stereoscope Canvas quiz	Objective: Students will be able to identify parts and procedures of the stereoscope Lesson Overview: video, lesson on skeletons Wrap-up: Canvas written assignment Quiz	Academic Standards: Cross-cutting concepts: Patterns
Tuesday	Use stereoscope	Objective: Students will be use a stereoscope to observe items Lesson Overview: intro: review parts of the stereoscope Spend time using stereoscopes Wrap-up student drawings	Academic Standards: patterns
Wednesday	Otes: Life cycles	Objective: Students will be able to order parts of animal life cycles Lesson Overview: Notes on life cycles, sequential patterns	Academic Standards: Cross-cutting concepts: patterns
Thursday	Canvas quiz	Objective: Students will describe life cycles for their animal, canvas quiz Lesson Overview: intro: finish any missing work	Academic Standards: Cross-cutting concepts: patterns
Friday	**NO SCHOOL**	**NO SCHOOL END OF 9 WEEKS** **FALL BREAK**	Academic Standards:

Name: GODWIN	Grading Quarter: 2	Week Beginning: WEEK 11
School Year: 2023-24	Subject: SCIENCE 7	

Monday	**NO SCHOOL**		
Tuesday	Notes: Life cycles	Objective: Students will be able to recognize life cycles as examples of sequential patterns Lesson Overview: intro: review types of patterns discussed so far. Review sequential patterns, give life cycles as example. Life cycle quiz	Academic Standards: patterns
Wednesday	Guest speaker: water tables	Objective: Students will learn about local water sources Lesson Overview: Guest speaker	Academic Standards: Cross-cutting concepts: patterns
Thursday	Canvas written assignment	Objective: Students will describe life cycles for their animal, canvas quiz Lesson Overview: intro: Review of Tuesday's assignment, Written work assignment	Academic Standards: Cross-cutting concepts: patterns
Friday	**CAREER DAY**	**SCHOOL-WIDE CAREER DAY**	Academic Standards: Explore careers

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 12
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Power Point, Cause and effect Canvas quiz	Objective: Students will be able to differentiate between cause and effect in a sample situation Lesson overview: review pattern types. Cause and effect is the last type. Powerpoint and notes. Canvas quiz	
Tuesday	Notes: none, Canvas written assignment	Objective: Students will be able to write cause and effect statements. Students will learn to color code sentences for cause and effect. Lesson Overview: intro: review yesterday's material. Go over written work expectations. Assignment	Academic Standards: patterns
Wednesday	Notes: Cause and effect, Habitats Canvas quiz	Objective: Students will be able to explain how specific adaptations develop because of the habitat type Lesson Overview: Give examples of different animals and ask why the animals are the way they are. Have class logic through reasons for animal adaptations	Academic Standards: Cross-cutting concepts: patterns **6.L2U3.12** 6.L2U1.13
Thursday	Canvas written assignment	Objective: Students will be able to identify the habitat of an animal based on its adatations Lesson Overview: intro: Review yesterday's lesson, go over written work expectations, written assignment	Academic Standards: Cross-cutting concepts: patterns
Friday	Friday wrap-up	Friday quiz. Students will self-evaluate grade and performance this week. Students will demonstrate understanding of the concepts for the week	Academic Standards:

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 13
School Year: 2023-24		Subject: SCIENCE 7	
Monday	RED RIBBON WEEK: INTRODUCTION	Objective: students will be able to explain the history of red ribbon week. Students will create a personal Natural High poster	Academic Standards: patterns
Tuesday	RED RIBBON WEEK: ALCOHOL	Objective: Students will be able to verbalize ways to say "no" when approached about drinking. Students will understand the dangers associated with drinking	Academic Standards: patterns
Wednesday	RED RIBBON WEEK VAPING, SMOKING, MARIJUANA	Objective: Students will be able to differentiate between vaping, huffing, smoking and marijuana use. Students will to a service project and will breathe fresh air	Academic Standards:
Thursday	RED RIBBON WEEK SYNTHITIC DRUGS	Objective: Students will summarize what was learned this week	Academic Standards:
Friday	RED RIBBON WEEK DEA SPEAKER	Students will attend a DEA presentation on Red ribbon week topics	Academic Standards:

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 13
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Cause and effect study: Skin color Canvas quiz	Objective: students will be able to explain the cause/effect reasons behind human skin color variation	Academic Standards: patterns
Tuesday	Notes: none. Written Canvas assignment	Objective: Students will be able to identify reasons for skin color variation in humans and animals Lesson Overview: intro: review yesterday's work. Canvas written assignment	Academic Standards: patterns
Wednesday	Notes: Independent and Dependent variables as they relate to cause and effect Canvas quiz	Objective: Students will be able to find independent and dependent variables given a situation Lesson Overview: Review cause and effect. Translate cause to independent variable and effect to dependent variable	Academic Standards: Cross-cutting concepts: patterns
Thursday	Canvas written assignment	Objective: Students will evaluate scientific experiments to identify independent, dependent and control variables Lesson Overview: intro: Review yesterday's lesson. Add control variables. Written assignment	Academic Standards: Cross-cutting concepts: patterns
Friday	Veteran's day off	Verterans day off	Academic Standards:

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 14
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: line and bar graphs, canvas quiz	Objective: Students will be able to tell when is is appropriate to use a line graph and when to make a bar graph. Students will create both a line and a bar graph Lesson Overview: intro: review of independent and dependent variables. Relate these to graphing, notes, canvas quiz	
Tuesday	Notes: None, written assignment, canvas	Objective: Students will be able to great a simple line and bar graph Lesson Overview: intro: review graph types, create sample graphs	Academic Standards: patterns
Wednesday	Graphing on the computer	Objective: Students will be able to independently create both a line and bar graph on the computer using Kid's Zone Lesson Overview: Teacher models website use, students create graphs	Academic Standards: Cross-cutting concepts: patterns
Thursday	Notes: Scatter plots, notes Canvas quiz	Objective: Students will be able to interpret a scatter plot to find positive, negative and no correlation Lesson Overview: intro: sample scatter plots and evaluation. Canvas quiz	Academic Standards: Cross-cutting concepts: patterns
Friday	Friday quiz	Friday quiz. Students will self-evaluate grade and performance this week. Students will demonstrate understanding of the concepts for the week	Academic Standards:

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 15
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Scatter plot written assignment and graph creation	Students will create a simple scatter plot and evaluate correlation	
Tuesday	Graphing review and computer creation of scatter plot	Objective: Students will be able to Lesson Overview: intro: r	Academic Standards: patterns
Wednesday	**THANKSGIVING BREAK**		
Thursday	**THANKSGIVING BREAK**		
Friday	**THANKSGIVING BREAK**		

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 16
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes: Grouping in science Canvas quiz	Objective: Students will be able to group objects according to similar characteristics Lesson overview Hands on sorting, notes, quiz	Academic Standards: Patterns ESL #2
Tuesday	Written assignment	Objective: Students will be able to group objects according to their similaraties Lesson Overview: review of notes, hands on sorting #2, written assignment	Academic Standards: patterns
Wednesday	Notes: Kingdoms of living things.	Objective: Students will be able to identify living things according to characteristics. Students will know the characteristics of the 5 kingdom classification system Lesson Overview: Hands-on sorting #3 Notes on Kingdoms Canvas quiz	Academic Standards: Cross-cutting concepts: patterns
Thursday	Canvas written assignment	Objective: Students will be ble to sort living things into the 4 kigdoms. Lesson Overview: intro: Hands-on sorting #4 Review characteristics of the 5 kingdom classification system, written system	Academic Standards: Cross-cutting concepts: patterns
Friday	Friday Wrap-up quiz	Students will demonstrate knowledge of the week's material. Students will check grades, check for missing work, do wrap-up knowledge check and create a relevant graph	Academic Standards:

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 17
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Using Venn Diagrams Notes, practice sorting into Venn Diagrams	Objective: Students will be able to read and create Venn Diagrams Lesson overview: Sorting #5, sort into two groups and find similarities between the two groups Notes, Canvas quiz, math connection	Standards: Patterning ELL 7.W.1
Tuesday	Using Venn diagrams Written assignment	Objective: Students will be able to read and create Venn Diagrams Lesson Overview: review from yesterday's lesson, practice drawing diagram, Written assignment	Academic Standards: patterns ELL 7.W.1
Wednesday	Using Dichotomous keys	Objective: Students will be able to use a simple Dichotomous key to identify items Lesson Overview: Paly 20Q as a class, modeling of using keys, use keys as a class, Canvas quiz	Academic Standards: Cross-cutting concepts: patterns ELL 7.W.1
Thursday	Bill Nye Biodiversity video and quiz	Objective: Students will understand the term "Biodiversity" and will be able to give examples. Lesson Overview: Substitute today. Watch video and answer questions as they watch video	Academic Standards: Cross-cutting concepts: patterns ELL 7.W.1
Friday	NEXIS	NEXIS lesson	Academic Standards:

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 18
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Writing Dichotomous keys, notes and quiz	Objective: Students will be able to create a simple Dichotomous key to identify objects Lesson Overview: Review using keys. Notes and practice on creating trees leading to keys, Canvas quiz	Science ELL 7.W.1
Tuesday	Writing keys, written assignment	Objective: Students will be able to write a simple key using a tree as a map Lesson Overview: intro: review steps to creating a key from sorting into groups, making a tree and then making the key. Written assignment	Academic Standards: patterns ELL 7.W.1
Wednesday	Taxonomy of vertebrates	Objective: Students will be able to classify vertebrates into Orders using characteristics Lesson Overview: Intro: simple key to identify the orders of vertebrates, notes on orders, quiz	Academic Standards: Cross-cutting concepts: patterns ELL 7.W.1
Thursday	Taxonomy of vertebrates Canvas written assignment	Objective: Students will be able to classify vertebrates according to characteristics Lesson Overview: intro: Review classes, written assignment.	Academic Standards: Cross-cutting concepts: patterns communication ELL 7.W.1
Friday	Friday quiz	Students will demonstrate knowledge of the week's material. Students will check grades, check for missing work, do wrap-up knowledge check and create a relevant graph	Academic Standards: patterns communication ELL 7.W.1

Name: GODWIN		Grading Quarter: 2	Week Beginning: WEEK 19
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Review for mid-term	Students will work on a cloze review assignment over Semester 1 material	
Tuesday	Mid-term test	Objective: Students will demonstrate knowledge of semester 1 material Lesson Overview: testing whole period. Student will have 2 chances to do questions	Academic Standards: patterns Written responses ELL
Wednesday		FUN DAY	
Thursday		WINTER BREAK	
Friday		WINTER BREAK	

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 20 Jan 9-12
School Year: 2023-24		Subject: SCIENCE 7	
Monday	**NO SCHOOL**		
Tuesday	Bill Nye introduction to atoms	Objective: Students will be able to identify the parts of an atom Lesson Overview: Review learning from videos, preview questions to watch for on the video. Discuss standardized testing hints.	Academic Standards: Atoms P1: 6.P1U1.3 Written responses ELL
Wednesday	Notes on atoms, quiz	Objective: Students will be able to identify the parts of an atom Lesson Overview: review yesterday's lesson, Powerpoint, notes, quiz	Academic Standards: Atoms P1: 6.P1U1.3 Written responses ELL
Thursday	Canvas written assignment. Atoms	Objective: Students will be able to identify the parts of an atoms Lesson Overview: intro: Review of notes, written assignment	Academic Standards: Atoms P1: 6.P1U1.3 Written responses ELL
Friday	Friday quiz, grade and progress check for this semester and overall course	Friday quiz, check grades, make graph	Academic Standards:

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 21 Jan 16-19
School Year: 2023-24		Subject: SCIENCE 7	
Monday	NO SCHOOL		
Tuesday	Notes: Elements and periodic table	Objective: Students will be able to read and interpret the periodic table. Students will memorize the 10 most abundant elements on earth. Lesson Overview: intro: review of atoms from last week. Use periodic table in planner to mark atoms to memorize Power Point, periodic table, quiz	Academic Standards: patterns Atoms P1: 6.P1U1.3 Written responses ELL
Wednesday	Elements and the periodic table written work	Objective: Students will draw elements and demonstrate knowledge of periodic table Lesson Overview: review, written work, prep for quiz	Academic Standards: Atoms P1: 6.P1U1.3 Written responses ELL
Thursday	Draw atoms, review for quiz	Objective: Students will Lesson Overview: intro: Review, drawing atoms worksheet and crossword puzzle	Academic Standards: Atoms P1: 6.P1U1.3 Written responses ELL
Friday	Elements quiz	Students will demonstrate knowledge of element names and symbols	Academic Standards: Atoms P1: 6.P1U1.3 Written responses ELL

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 22 Jan 22-26
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Compounds and molecules	Objective: Students will be able to make a model of how atoms combine. Power Point, notes, quiz Lesson Overview: intro: review of atomic structure and elements' symbols.	Academic Standards: Compounds: Written responses ELL
Tuesday	Molecules	Objective: Students will be able to draw atoms and demonstrate how atoms combine Lesson Overview: intro: review of notes, daily assignment	Academic Standards: Compounds: Written responses ELL
Wednesday	Intro to Photosynthesis	Objective: students will be able to explain the molecular formula for photosynthesis Lesson Overview: review C, H, O elements. Notes, quiz	Academic Standards: Photosynthesis Written responses ELL
Thursday	Photosynthesis, Canvas written assignment	Objective: Students will be able to read and explain the formula for photosynthesis Lesson Overview: intro: Review of notes, written work	Academic Standards: Photosynthesis Written responses ELL
Friday	Friday quiz	Friday quiz and progress check	Academic Standards: Photosynthesis Written responses ELL

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 23 Jan 29-Feb 2
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes, quiz Intro to cellular respiration, notes	Objective: Students will be able to interpret the formula for cellular respiration, Lesson Overview: intro: Powerpoint, notes	Academic Standards: Photosynthesis Written responses ELL
Tuesday	Review and Written assignment	Objective: Students will be able to relate photosynthesis and respiration and the relationship between plants and animals Lesson Overview: intro: review notes, written work	Academic Standards: Photosynthesis Written responses ELL
Wednesday	Food webs, niches Notes, quiz	Objective: Students will be able to follow a food web and describe relationships within food webs and food chains Lesson Overview: review photosynthesis/respiration cycles. Introduce food chains and then move on to food webs, quiz	Academic Standards: Food webs Written responses ELL
Thursday	Canvas written assignment	Objective: Students will be able to follow a food web and describe relationships within food webs and food chains Lesson Overview: intro: Review food chains/webs. Written assignments. Add to animal reports.	Academic Standards: Food webs Written responses ELL
Friday	Friday quiz and progress check	Friday quiz, progress check, weekly graph	Academic Standards: Cycling of matter

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 24 Feb 5-9
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes, quiz	Objective: Students will be able to label and describe the parts of the digestive system Lesson Overview: review food webs and respiration formula, notes on digestion, quiz	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Tuesday	Review and Written assignment	Objective: Students will be able to label and describe the parts of the digestive system Lesson Overview: intro: review notes, written assignment.	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Wednesday	Review for benchmark	Objective: Students will be able to describe the relationship between atoms, calories, food webs and life Lesson Overview:	Academic Standards:
Thursday	Begin benchmark P/T conferences	Objective: Short day. Benchmark part 1	Academic Standards:
Friday	Finish benchmark P/T conferences	Short day, benchmark part 2	Academic Standards:

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 25 Feb 12-15
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Respiratory system	Objective: Students will be able to label the parts of the respiratory system and explain the functions of each organ Lesson Overview: body models, introduce parts, power point, quiz	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Tuesday	Circulatory system	Objective: Students will be able to to label the parts of the circulatory system and explain the functions of each organ Lesson Overview: intro: body models, introduce parts, power point, quiz	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Wednesday	Muscular system	Objective: Students will be able to to label the parts of the muscular system system and explain the functions of each organ Lesson Overview: intro: body models, introduce parts, power point, quiz	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Thursday	Nervous system	Objective: Students will be able to to label the parts of the Nervous system and explain the functions of each organ Lesson Overview: intro: Review intro: body models, introduce parts, power point, quiz	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Friday	NO SCHOOL		

Name: GODWIN	Grading Quarter: 3	Week Beginning: WEEK 26 Feb 20-23
School Year: 2023-24	Subject: SCIENCE 7	

Monday	NO SCHOOL		
Tuesday	Fetal pig model	Objective: Students will create a paper model of the organs of a fetal pig Lesson Overview: intro: video of fetal pig organs. Begin model	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Wednesday	Work on model	Objective: Students will create a paper model of the organs of a fetal pig Lesson Overview: continue models	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Thursday	Work on model	Finish models	Academic Standards: 7.L1U1.9 7.L1U1.11 Written responses ELL
Friday	Friday quiz and progress check	Friday quiz, progress check, weekly graph	Academic Standards:

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 27 Feb 26-March 1
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Notes, quiz	Objective: Students will be able to state and explain the qualifications that define living things Lesson Overview: intro:notes, living things	Academic Standards: Living things Written responses ELL
Tuesday	Review and Written assignment	Objective: Students will be able to explain the qulaifications that define living things Lesson Overview: intro: review notes, written work	Academic Standards: Living things Written responses ELL
Wednesday	Microscopes Notes, quiz	Objective: Students will be able label the parts of, and use a compound microscope Lesson Overview: go over parts of the microscope, magnification math	Academic Standards:
Thursday	Canvas written assignment	Objective: Students will Lesson Overview: intro: Review	Academic Standards:
Friday	Friday quiz and progress check	Friday quiz, progress check, weekly graph	Academic Standards:

Name: GODWIN		Grading Quarter: 3	Week Beginning: WEEK 28 March 4-8
School Year: 2023-24		Subject: SCIENCE 7	
Monday	Cells Notes, quiz	Objective: Students will be able to draw and identify part of an basic cell, quiz. Lesson Overview: intro:	Academic Standards: L1: 7.L1U1.8 7.L1U1.9 Written responses ELL
Tuesday	Review and Written assignment	Objective: Students will be able to draw and identify part of a basic cell, written assignment Lesson Overview: intro:	Academic Standards: L1: 7.L1U1.8 7.L1U1.9 Written responses ELL
Wednesday	Notes, quiz	Objective: Students will be able to draw and identify the parts of a plant cell Lesson Overview:	Academic Standards: L1: 7.L1U1.8 7.L1U1.9 Written responses ELL
Thursday	Canvas written assignment	Objective: Students will create a drawing or model of a plant or animal cell Lesson Overview: intro: Review cell parts. Introduce objective of cell model	Academic Standards: L1: 7.L1U1.8 7.L1U1.9 Written responses ELL
Friday	**FUN DAY**		

SPRING BREAK

SCOPE AND SEQUENCE: Science 7, BRJHS

SEMESTER ONE: THE BIG PICTURE

This quarter introduces the main concepts for 7th grade life science. Patterning is stressed and interwoven into each
Cause-and-effect. Course will utilize the 5E model of instruction: Engage, Explore, Explain, Elaborate, Explain.

Week	Concept(s)	Az State Science Standards[1]	Crosscutting concepts and b information[2]
1-2	Introduction to learning in Canvas, class pretest, logical thinking		
3-4	Using Canvas and navigating online learning platforms, notetaking, answering questions, learning styles, avoiding plagiarism	7.W.7 Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. 7.W.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. 7.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. 7.SL.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, appropriate vocabulary, facts, details, and examples; use appropriate eye contact, adequate	
5-6	Research project, self-guided research, creating presentations, presenting to class. Intro to ecosystems, food chain, observation skills		**Interdependent organisms** living together in particular environ **ecosystem**. In a stable ecosystem there are **producers** of food (and **decomposers**, (bacteria and fungi which feed on waste pro

[1] Arizona State Science Standards, https://www.azed.gov/standards-practices/k-12standards/standards-science
[2] Arizona State Science Standards, https://www.azed.gov/standards-practices/k-12standards/standards-science

		volume, and clear pronunciation. 7.SL.5 Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	
7-8	What is science, patterns overview, visual pattering in science: camouflage, skeletons	U1: Scientists explain phenomena using evidence obtained from observations and or scientific investigations. Evidence may lead to developing models and or theories to make sense of phenomena. As new evidence is discovered, models and theories can be revised.	The crosscutting concepts identified in *A Framework for K-12 Sc* ● patterns ● structure and function ● systems and system models
9-10	Repeating patterns: collecting leaves, using a stereoscope Sequential patterns: life cycles		The crosscutting concepts identified in *A Framework for K-12 Sc* ● patterns ● structure and function ● systems and system models
11-12	Cause and effect patterns: life cycles and growth, adapting to habitats, skin color, variables	**Develop and use models** to demonstrate the interdependence of organisms and their environment including biotic and abiotic factors.	The crosscutting concepts identified in *A Framework for K-12 Sc* ● patterns ● cause and effect ● structure and function ● systems and system models ● stability and change **Interdependent organisms** living together in particular environ**ecosystem**. In a stable ecosystem there are **producers** of food (and **decomposers**, (bacteria and fungi which feed on waste pro decomposers produce materials that help plants to grow, so the are constantly re-used. At the same time, **energy** resources pas **food** is used by organisms for **life processes** some energy is **diss** in the ecosystem by **radiation** from the **Sun** being used to produ **Genes** are located in the **chromosomes** of **cells**, with each chro variants of each of many distinct genes. Each distinct gene chief specific **protein**, which in turn affects the **traits** of the individua from the actions of proteins that control the production of the p **Food webs** are models that demonstrate how matter and energ producers (generally plants and other organisms that engage in and decomposers as the three groups interact—primarily for fo Transfers of matter into and out of the physical environment oc example, when molecules from food react with oxygen capture carbon dioxide and water thus produced are transferred back to ultimately so are waste products, such as fecal material. Decom dead plant or animal matter back to the soil in terrestrial enviro aquatic environments. The atoms that make up the organisms i repeatedly between the living and nonliving parts of the ecosys In any given ecosystem there is **competition** among species fo materials they need to live. The persistence of an ecosyste availability in the environment of these energy resources and populations of organisms are dependent on their environment
13-14	Grouping patterns: food webs, food chains and niches, Venn diagrams, classifying living things	P4: The total amount of energy in a closed system is always the same but can be transferred from one energy store to another during an event. **6.L2U3.12Engage in argument from evidence** to support a claim about the factors that cause species to change and how humans can impact those factors. 6.L2U1.13**Develop and use models** to demonstrate the interdependence of organisms and their environment including biotic and abiotic factors.	

			living things and with **nonliving** factors. Growth of organisms limited by access to resources. In any ecosystem, organisms requirements for food, water, oxygen, or other **resources** ma limited resources, access to which consequently constrains t Similarly, **predatory** interactions may reduce the number of populations of organisms. **Mutually beneficial** interactions, interdependent that each organism requires the other for survi in which multiple **species** of different types are each able to r stable web of life. Ecosystems are dynamic in nature; their cha Disruptions to any physical or biological component of an ecosy its populations. [4] (p. 155)
15-16	Demonstrating patterning with graphs: bar, line and scatter plot, creating graphs in the computer, interpreting graphs		The crosscutting concepts identified in *A Framework for K-12 Sc* ● patterns ● cause and effect ● systems and system models ● scale, proportion, and quantity
17-18	Using grouping for identification and classification: dichotomous keys QUARTER ONE BENCHMARK TEST		The crosscutting concepts identified in *A Framework for K-12 Sc* ● patterns ● structure and function

SEMESTER TWO: THE DETAILS

This quarter introduces the details, "how", of life science. Cause and effect patterning is stressed and interwoven int

Week	Concept(s)	Standard(s)	Crosscutting concepts and information
1-2	Introduction to atoms, molecules and compounds, chemistry of life: photosynthesis and respiration	P1: All matter in the Universe is made of very small particles. 6.P1U1.3 Develop and use models to represent that matter is made of smaller particles called atoms 6.L2U1.14 **Construct a model** that shows the cycling of matter and flow of energy in ecosystems. 8.L2U1.12 **Construct an explanation** for how some plant cells convert light energy into food energy. 8.P1U1.1 **Develop and use a model** to demonstrate that atoms and molecules can be combined or rearranged in chemical reactions to form new compounds with the total number of each type of atom conserved. L2: Organisms require a supply of energy and materials for which	The crosscutting concepts identified in *A Framework for K* ● patterns ● energy and matter If a **substance** could be divided into smaller and smaller p made of very, very small **particles**, smaller than can be se materials, anywhere in the universe, living and non-living number of basic 'building blocks' called **atoms**, of which t kinds. The properties of different materials can be explain the atoms and groups of atoms of which they are made All materials, anywhere in the universe, living and non-liv numbers of basic 'building blocks' called **atoms**, of which kinds. **Substances** made of only one kind of atom are call different elements can combine together to form a very l **chemical reaction** involves a rearrangement of the atoms form new substances, while the total amount of matter r process, the atoms that make up the original substances molecules, and these new substances have different prop reactants. The total number of each type of atom is conse not change. Some chemical reactions release energy, oth In most cases, the energy needed for life is ultimately der **photosynthesis** (although in some ecologically important reactions involving inorganic chemicals in the absence of
3-4	Chemistry of food, internal organs, body systems		

		they often depend on, or compete with, other organisms. 6.L2U1.14 **Construct a model** that shows the cycling of matter and flow of energy in ecosystems. 7.L1U1.9 **Develop and use a model** to explain how cells, tissues, and organ systems maintain life (animals). 7.L1U1.11**Construct an explanation** for how organisms maintain internal stability and evaluate the effect of the external factors on organisms' internal stability.	Plants, algae (including phytoplankton), and other energy sunlight, water and carbon dioxide to facilitate photosynt forms plant matter, releases oxygen, and maintains plant
5-6	Using a microscope, cells, single celled organisms, plant/animal cell	L1: Organisms are organized on a cellular basis and have a finite life span. 7.L1U1.8 **Obtain, evaluate, and communicate information** to provide evidence that all living things are made of cells, cells come from existing cells, and cells are the basic structural and functional unit of all living things. 7.L1U1.9 **Construct an explanation** to demonstrate the relationship between major cell structures and cell functions (plant and animal).	The crosscutting concepts identified in *A Framework for K* ● patterns ● structure and function ● systems and system models ● scale, proportion, and quantity All living organisms are made of one or more **cells**, which microscope. All the basic processes of life are the results Cells divide to replace aging cells and to make more cells Food is the energy source they need in order to carry out Some cells in **multicellular organisms**, as well as carrying do, are **specialized**; for example, muscle, blood and nerve functions within the organism. Cells are often aggregated organs, and organs into **organ systems**. In the human bod functions as respiration, digestion, elimination of waste a circulatory system takes material needed by cells to all pa soluble waste to the urinary system. Stem cells, which are repairing tissues by being programmed for different funct certain conditions. Both single cell and multi-cellular orga maintain temperature and acidity within certain limits tha survive.[2] (p. 26) Life is the quality that distinguishes living th from nonliving objects or those that have died. While a s difficult to capture, all living things - that is to say all orga common aspects of their structure and functioning.[4] (p.143 organized and built on a hierarchical structure, with each for the next, from the chemical foundation of elements a of individual organisms to species and populations living a ecosystems. Organisms range in composition from a **singl** microorganisms) to multicellular organisms, in which diffe of cells work together to form **systems of tissues and org** respiratory, nervous, musculoskeletal), that are specialize Within cells, special structures are responsible for part membrane forms the boundary that controls what ente (Boundary: At this grade level, only a few major cell str introduced.)[4] (p. 144) Organisms respond to **stimuli** from th maintain their internal environment through **homeostasi**
7-8 9-10	Cell division, meiosis and mitosis, DNA Reproduction in living things, inheritance, genetics	L3: Genetic information is passed down from one generation of organisms to another. 8.L3U1.9 **Construct an explanation** of how genetic variations occur in offspring through the inheritance of traits or through mutations. 8.L3U1.9 **Communicate** how advancements in technology have furthered the field of genetic research and use **evidence to support an argument** about the positive and negative effects of genetic research on human lives.	The crosscutting concepts identified in *A Framework for K* ● patterns ● cause and effect ● structure and function ● systems and system models ● stability and change **Genes** are located in the **chromosomes** of **cells**, with each two variants of each of many distinct genes. Each distinct production of a specific **protein**, which in turn affects the human skin color results from the actions of proteins that pigment melanin). Changes (**mutations**) to genes can resu which can affect the structures and functions of the organ **Sexual reproduction** provides for transmission of genetic through **egg** and **sperm cells**. These cells, which contain o parent's chromosome pair, unite to form a new individua

			possess one instance of each parent's chromosome pair (pair). Variations of **inherited traits** between parent and o differences that result from the subset of chromosomes (or (more rarely) from mutations. (Boundary: The stress h transmission in reproduction, not the mechanism.) [4] (pp. 15 organisms, each parent contributes half of the genes acq offspring. Individuals have two of each chromosome and gene, one acquired from each parent. These versions ma from each other. In addition to variations that arise from information can be altered because of mutations. Though changes to the structure and function of proteins. Some **harmful, and some neutral to the organism**. [4] (p. 160) Genetic variations among individuals in a population give in surviving and reproducing in their environment. This is leads to the predominance of certain traits in a populatio others.
11-12	Change over time, fossil evidence of change, geologic time, natural selection	6.L2U3.11**Engage in argument from evidence** to support a claim about the factors that cause species to change and how humans can impact those factors. 8.L4U1.11**Develop and use a model** to explain how natural selection may lead to increases and decreases of specific traits in populations over time.	The crosscutting concepts identified in *A Framework for K* ● patterns ● cause and effect ● structure and function ● systems and system models ● stability and change Genetic variations among individuals in a population give in surviving and reproducing in their environment. This is leads to the predominance of certain traits in a populatio others. In **artificial selection**, humans have the capacity t characteristics of organisms by selective breeding. One ca traits determined by genes, which are then passed on to natural selection acting over generations is one importan change over time in response to changes in environmenta support successful survival and reproduction in the new e common; those that do not become less common. Thus, population changes. In separated populations with differ be large enough that the populations, provided they rem reproductive isolation), evolve to become separate speci wide range of existing life forms that have adapted to the from terrestrial to marine ecosystems. Biodiversity includ species, in addition to species variation in different habita forests, grasslands, wetlands). Changes in biodiversity ca such as food, energy, and medicines, as well as ecosysten on—for example, water purification and recycling. [4] (p. 167) to obtain the water, light, minerals and space they need t particular locations characterized by climatic, geological a [27] The sorting and recombining of genetic material when formed and then fuse results in an immense variety of po and in differences that can be inherited from one generat the potential for **natural selection** as a result of some var better adapted to certain environmental conditions. [2] (p. 2
13-14	Evolution by natural selection	L4: The unity and diversity of organisms, living and extinct, is the result of evolution. 8.L4U1.12 **Gather and communicate evidence** on how the process of natural selection provides an explanation of how new species can evolve.	
15-16	Man's influence on nature: artificial selection, changes in environments Research project: how we can help	U2: The knowledge produced by science is used in engineering and technologies to solve problems and/or create products. U3: Applications of science often have both positive and negative ethical, social, economic, and/or political implications. 6.L2U3.11**Use evidence** to **construct an argument** regarding the impact of human activities on the environment and how they positively and negatively affect the competition for energy and resources in ecosystems.	The crosscutting concepts identified in *A Framework for K* ● patterns ● cause and effect ● structure and function ● systems and system models ● stability and change ● scale, proportion, and quantity Newly **introduced species** can damage the balance of an activities have significantly altered the biosphere, sometim natural habitats and causing the extinction of many other environments can have different impacts (negative and p things. Typically, as human populations and per-capita co increase, so do the negative impacts on Earth unless the involved are engineered otherwise. [4] (p. 196) Human activity certain plants and animals changes an ecosystem.[2](p.27) In ***artificial selection***, humans have the capacity to influen organisms by selective breeding. One can choose desired

			genes, which are then passed on to offspring. [4 (p. 164)] The s genetic material when egg and sperm cells are formed an immense variety of possible combinations of genes, and i inherited from one generation to another. These provide selection as a result of some variations making organisms environmental conditions. [2 (p. 28)]
17-18	Course wrap-up and final exam		

Arizona State Science Standards, https://www.azed.gov/standards-practices/k-12standards/standards-science

By the end of seventh grade, students will explore how energy is transferred in environmental processes. Students investigate and explain the structure and function of cells and understand how genetic information is passed down to produce variation among the populations. Students will describe how stability and change and the process of cause and effect influence changes in the natural world. Student investigations focus on collecting and making sense of observational data and measurements using the science and engineering practices: ask questions and define problems, develop and use models, plan and carry out investigations, analyze and interpret data, use mathematics and computational thinking, construct explanations and design solutions, engage in argument from evidence, and obtain, evaluate, and communicate information. While individual lessons may include connections to any of the crosscutting concepts, the standards in seventh grade focus on helping students understand phenomena though patterns, cause and effect, scale, proportion, and quantity; systems and system models; energy and matter structure and function and stability and change. [3]

Crosscutting Concepts

Crosscutting concepts[4] cross boundaries between science disciplines and provide an organizational framework to connect knowledge from various disciplines into a coherent and scientifically based view of the world. They build bridges between science and other disciplines and connect core ideas and practices throughout the fields of science and engineering. Their purpose is to provide a lens to help students deepen their understanding of the core ideas as they make sense of phenomena in the natural and designed worlds. The crosscutting concepts identified in *A Framework for K-12 Science Education* are: patterns, cause and effect, structure and function, systems and system models, stability and change, scale, proportion, and quantity, energy and matter

ELL STANDARDS

Grade 7 Writing 7.

[3] Arizona State Science Standards, https://www.azed.gov/standards-practices/k-12standards/standards-science

W.1 Write arguments to support claims with clear reasons and relevant evidence. a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. d. Establish and maintain a formal style. e. Provide a concluding statement or section that follows from and supports the argument presented.