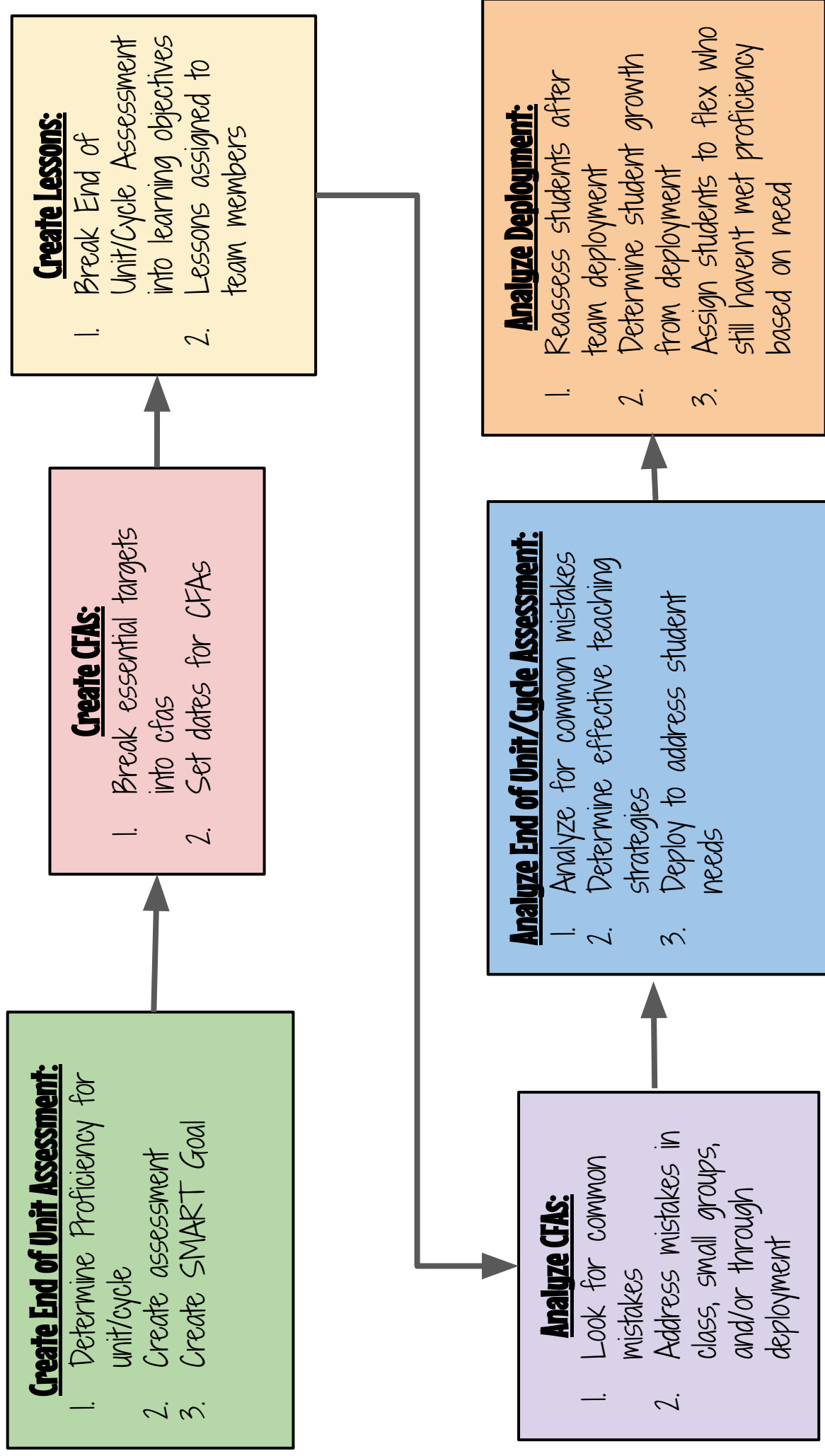


Science

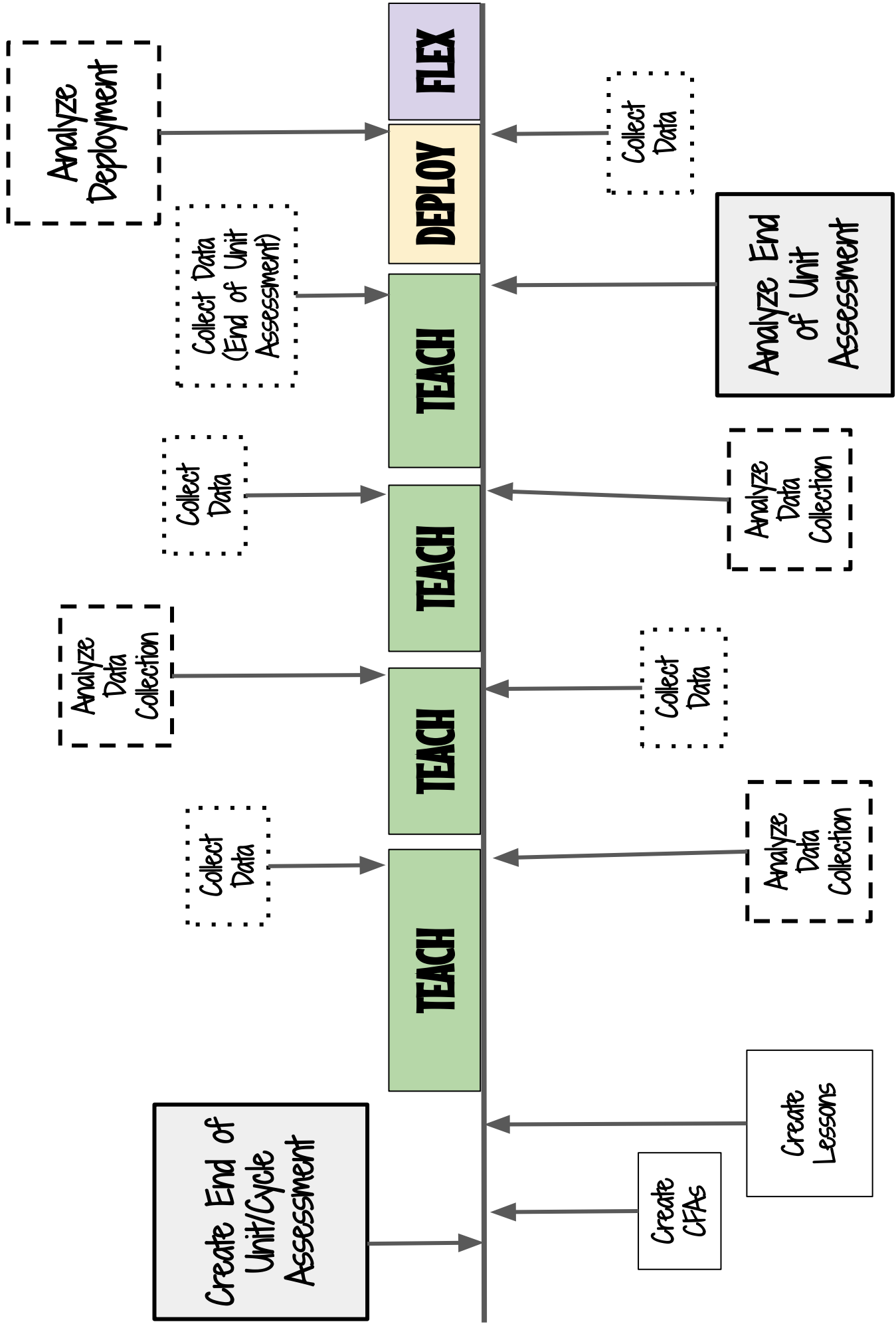
2023-2024



PLC Unit/Cycle



PLC Unit/Cycle



PROTOCOLS

EXAMPLE: (Create together as a Team)

Creating CFAs

- Each Team Member will have examples/questions prepared prior to the meeting and brought to the Team Meeting
- Each Team Member will create exemplar answers for the examples/questions they have created for the CFA completed and brought to the Team Meeting.

PLC Unit/Cycle

Science7 → Cycle 1 → August 2021

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (*what did you do that worked/didn't work?*)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
CFU End of Cycle 1 CFA		All Standards	LS1-6 <ul style="list-style-type: none"> • Matter • Atom • Producers/consumers/decomposers PS1-5 <ul style="list-style-type: none"> • Elements • Molecules LS2-3 <ul style="list-style-type: none"> • Abiotic/Biotic ESS2-1 <ul style="list-style-type: none"> • Earth's Layers

Begin cycle on _____. End on _____ (after Assessment: team data meeting on _____ students will be given feedback forms on _____ will be deployed on _____ based on data, and re-assessed on _____.)

Data Collection Checkpoints:

1.

Lessons:

1. **8/16/23 LS1-6** Today we will determine the differences between atoms, compounds and molecules (Allie)
2. **8/17/23 LS1-6** Determine the differences between light and chemical energy (authentic literacy) (Allie)
3. **8/18/23 PS1-5** Today we will identify parts of an atom (Hall)
4. **8/21/23 LS2-3** Today we will decide if an organism is abiotic or biotic using models (EDI) (Allie)
5. **8/22/23 LS2-3** Use informational text to identify if an organism is a Producer, Consumer, or Decomposer(EDI)(Allie)
6. **8/23/23 ESS2-1** Today we will Identify the different layers of the earth (inner core, outer core, mantle and crust) (Hall)
7. **8/24/23** Independent Practice (Hall)
8. **8/28/23** CFA
9. **8/29/23** Essential Standard (Elements)
10. **8/30/23** Deploy
11. **8/31/23** Reassess
12. **9/1/23** Start cycle 2

Note: Make sure Independent Practice tasks for each lesson, and each data collection method matches the format of the Assessment. Respond to each entry/exit ticket (data collection) method (either class by class or via collective response) with feedback!

PLC Unit/Cycle

Science7 → Cycle 2 → September 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		ALL Standards	LS1-6 <ul style="list-style-type: none"> • T6- Define photosynthesis • T7-Identify photo. As a chemical reaction • T8- Identify the reactants of photosynthesis • T9- Identify the products of photosynthesis PS1-5 <ul style="list-style-type: none"> • Chemical energy LS2-3 <ul style="list-style-type: none"> • Define ecosystems • Organisms ESS2-1 <ul style="list-style-type: none"> • Define rock • Define minerals

Data Collection Checkpoints:

1. _____ END OF CYCLE 2 CFA
2. _____ REASSESS END OF CYCLE 2 CFA

Lessons:

1. **9/5/23 PS1-5** Today we will identify reactants of a chemical reaction (Hall)
2. **9/6/23 PS1-5** Today we will identify products of a chemical reaction (Allie)
3. **9/7/23 PS1-5** Use a real life example to explain the Law of Conservation of Mass (Lab balloon baking soda) (Allie)
4. **9/8/23 LS1-6** Today we will locate evidence of a producer, consumer, and decomposer within a text. (Allie)
5. **9/11/23 LS1-6** Today we will identify Photosynthesis as a Chemical Reaction (reactants/products) (Allie)
6. **9/12/23 LS2-3** Today we will describe how chemical energy cycles through photosynthesis and cellular respiration. (Hall)
7. **9/13/23 LS2-3** Today we will describe how photosynthesis and cellular respiration cycle chemical energy. EXIT TICKET (Gonzalez)
8. **9/14/23 ESS2-1** Today we will distinguish the difference between rocks and minerals (Hall)
9. **9/15/23 Deploy on Exit Ticket**
10. **9/18/23 ESS2-1** Today we will explain the rock cycle using informational text (Allie)
11. **9/19/23 ESS2-1** Today we will be able to identify sedimentary rocks/igneous rocks/metamorphic (Allie)
12. **9/20/23 PLC Day** (Independent practice)
13. **9/21/23 Independent**
14. **9/22/23 Cycle 2 CFA**
15. **9/25/23 Deploy (Give feedback)**
16. **9/26/23 Reasses**
- 17.

Note: Make sure Independent Practice tasks for each lesson, and each data collection method matches the format of the Assessment. Respond to each entry/exit ticket (data collection) method (either class by class or via collective response) with feedback!

PLC Unit/Cycle

Science7 → Cycle 3 → October 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		ALL Standards	<p>LS1-6</p> <ul style="list-style-type: none"> • Locate evidence in text of photosynthesis • Create a model to describe how energy and matter flow in photosynthesis <p>PS1-5</p> <ul style="list-style-type: none"> • Define substances Identify the states of matter Describe Physical changes/properties (color, hardness,malleability,solubility,electrical conductivity,density,melting points, and boiling points) Distinguish the characteristics of a chemical reaction Describe chemical changes/properties <p>LS2-3</p> <ul style="list-style-type: none"> • Describe Metabolism and how energy is lost in the ecosystem • Use a pyramid or food web to describe metabolism (energy and matter cycling) • Identify cause and effect relationships in an ecosystem <p>ESS2-1</p> <ul style="list-style-type: none"> • Define thermal energy • Identify when melting occurs in the rock cycle • Identify when crystalization occurs in the rock cycle

Data Collection Checkpoints:

1. _____ End of Cycle 3
2. _____ Reassess End of Cycle 3

Lessons:

1. 09/27/23 LS1-6 Today we will label a Photosynthesis model using informational text (Hall)
2. 09/28/23 LS1-6 Today we will use a Photosynthesis model to describe the flow of energy and matter in an ecosystem (Hall)
3. 10/29/23 LS2-3 Today we will describe metabolism using a pyramid model (allie)
4. 10/3/23 LS2-3 Today we will explain metabolism using a pyramid model (write) (Allie)
5. 10/4/23 LS2-3 Today we will create a model to show the cause and effect relationships within an ecosystem (allie)
6. 09/30/23 PS1-5 Today we will identify the states of matter within a substance (Lesson Review Chemical Energy during flex)
7. 9//23 PS1-5 physical change
8. 10/2/23 PS1-5 Chemical change
9. 10/3/23 Cycling of matter and energy
10. 10/4/23 Thermal energy crystallization and melting
11. IP
12. CFA
13. Feedback deploy
14. Deploy
15. Retest

Note: Make sure Independent Practice tasks for each lesson, and each data collection method matches the format of the Assessment. Respond to each entry/exit ticket (data collection) method (either class by class or via collective response) with feedback!

PLC Unit/Cycle

Science7 → Cycle 4 → October 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		ALL Standards	LS1-6 <ul style="list-style-type: none"> • Metabolism • Locate evidence in text of producer, consumer and decomposer PS1-5 <ul style="list-style-type: none"> • States of matter • Physical change • Chemical change LS2-3 <ul style="list-style-type: none"> • Cycling of matter/energy ESS2-1 <ul style="list-style-type: none"> • Thermal energy • Melting • Crystallization

Data Collection Checkpoints:

1.

Lessons:

1. 10/13/23 LS1-6 Today we will learn how to create a model of photosynthesis (Day 1)
2. 10/16/23 LS1-6 Today we will learn how to create a model of photosynthesis (Day 2)
3. 10/17/23 LS1-6 Today we will explain a model we created due to photosynthesis (Day 1)
4. 10/18/23 LS1-6 Today we will explain a model we created due to photosynthesis (Day 2)
5. 10/19/23 Independent practice/ small group
6. 10/20/23 Proficiency CFA

Note: Make sure Independent Practice tasks for each lesson, and each data collection method matches the format of the Assessment. Respond to each entry/exit ticket (data collection) method (either class by class or via collective response) with feedback!

PLC Unit/Cycle

Science7 → Cycle 5 → November 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		<p>ALL Standards</p>	<p>LS1-6</p> <ul style="list-style-type: none"> • Create a model of Photosynthesis • Explain a model of photosynthesis

1.

Lessons:

1. **10/23/22 Feedback on LS1-6 photosynthesis**
2. **10/24/23 LS2-3** Today we will identify cause and effect of relationships between the environment and its organisms (use food web)
3. 10/25/23 PS1-5 Today we will learn how to identify coefficients and subscripts within a chemical equation
4. 10/26/23 PS1-5 Today we will learn how to identify different elements on the periodic table
5. 10/27/23 No School (PD day)
6. 10/30/23 PS1-5 Today we will learn how to draw a model of an atom.
7. 10/31/23 PS1-5 Today we will learn how to draw a model of a molecule.
8. 11/1/23 ESS2-3 Today we will learn how the water cycle (FLEX lesson) drives weathering and erosion (solar energy)
9. 11/2/23 Independent practice
10. 11/3/23 CFA
11. 11/6/23 Deploy
12. 11/7/23 Deploy
13. 11/8/23 reassess
14. 11/10/23 NO school

PLC Unit/Cycle

Science7 → Cycle 6 → December 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		LS2-3 PS1-5 ESS2-1	LS2-3 <ul style="list-style-type: none"> ● Cause & effect of relationship ● Food Webs PS1-5 <ul style="list-style-type: none"> ● Coefficients/subscripts (Reactants and products review) ● Chemical equations ● Balanced equations ESS2-1 <ul style="list-style-type: none"> ● Water cycle ● Weathering and erosion ● Solar energy ● Sedimentation and compaction ● Heat and pressure ● Thermal energy ● Convection

Data Collection Checkpoints:

1.



PLC Unit/Cycle

Lessons:

11/9/23 LS2-3 Today we will develop a model of an ecosystem

11/13/23 LS2-3 Today we will explain how energy cycles through the ecosystem
(Lesson in flex on energy)

11/14/23 LS2-3 Today we will explain how matter cycles through an ecosystem
(Lesson in flex on matter)

11/15/23 Independent practice

11/16/23 LS2-3 Proficiency CFA

11/17/23 LS2-3 Proficiency CFA

PLC Unit/Cycle

Science7 → Cycle 7 → January 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		LS2-3	<p>LS2-3</p> <ul style="list-style-type: none"> • Develop a model of an ecosystem • Explain the model and how matter and energy are cycling through the environment <p>Test to Proficiency</p>

Data Collection Checkpoints:

1.

Lessons:

11/27/23 ESS2-1 Today we will learn how thermal energy drives heat and pressure within the rock cycle (convection and cycling of matter flex lesson)

11/28/23 Today we will develop a model of the rock cycle

11/29/23 Today we will learn how to describe a model of the rock cycle

11/30/23 Independent practice

12/1/23 Proficiency CFA

PLC Unit/Cycle

Science7 → Cycle 8 → January 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		PS1-5	PS1-5 <ul style="list-style-type: none"> ● Define a model ● Create a model of an atom ● Create a model of a molecule ● Describe the LOC using a model

Data Collection Checkpoints:

1.



Lessons:

1. 12/4/23 PS1-5 Today we will learn how to balance chemical equations using a model (Day 1)
2. 12/5/23 PS1-5 Today we will learn how to balance equations using a model (Day 2)
3. 12/6/23 PS1-5 Today we will learn how to identify if an experiment supports the LOC of mass
4. 12/7/23 PS1-5 Today we will determine if photosynthesis follows the LOC of mass
5. 12/8/23 Today we will learn how to explain if a chemical equation supports the LOC of mass
6. 12/11/23 PS1-5 Independent practice
7. 12/12/23 PS1-5 Proficiency CFA
8. 12/13/23 PS1-5 Proficiency CFA
9. 12/14/23 LAB
10. 12/15/23 LAB

PLC Unit/Cycle

Science7 → Cycle 9 → January 2022

Create End of Cycle Assessment

- Determine Standards/Target Skills that will be assessed during the Cycle
- * Determine Labs/Hands-on Tasks student will complete
- * Each teacher set individual SMART Goals (Kid by Kid)
- Team met to discuss TEAM SMART GOALS
- Finalize "CFA Planning Form: Pre-Assessment"

Create Data Collection Checkpoints

- * Break End of Cycle CFA into Data Collection points
- Set dates for Data Collection
- Set dates for when Data will be inputted into the teams Tracking Sheet

Create Lessons

- * Break End Of Cycle Assessment into Learning Objectives
- Lessons assigned to team members
- Set dates for when Lessons/Handouts will be completed

Analyze Data Collection - utilize and address this in individual classes through the Cycle

- Look for victories and common mistakes
- Provide feedback and address mistakes in class/small group/deployment

Analyze End of Cycle Assessment

- * Look for victories and common mistakes
- * Determine effective teaching strategies (what did you do that worked/didn't work?)
- Analyze and Finalize "CFA Data Form: Post-Assessment"
- Provide Feedback
- Deploy to address student needs

Analyze Deployment

- Reassess students after team Deployment
- Determine student growth from Deployment

Assessment:	Date:	Standards:	Target/Skills
		PS1-5	PS1-5 <ul style="list-style-type: none"> ● Define a model ● Create a model of an atom ● Create a model of a molecule ● Describe the LOC using a model

Data Collection Checkpoints:

1.

Lessons:



Liberty Middle School
CFA Planning Form: Pre-assessment

Today's Date: _____ Date of Assessment: _____ Scoring Calibration: _____

PLC: Science 7 Standards Tested:

Conditions for Administration:

Review prior: yes no

Special Ed Accommodations:

Proficiency:

Smart Goal:

standard	LS1-6	LS2-3	ESS3-2	PS1-2
skills	Photosynthesis	Cycle of Matter & Energy	Natural Hazards	Chemical Reactions
SMART GOALS				
# of Students				

Date of Data Meeting: _____ - (Not more than one week after the date of the assessment).

Date students receive Feedback: _____

Date(s) of Deployment: _____



Liberty Middle School
CFA Data Form: Post-Assessment

Today's Date: _____ Date of Assessment: _____ Scoring Calibration: _____

PLC: Science 7

Standards Tested:

Proficiency:

SMART Goal:

standard	LS1-6		
skills	EX: Differences of Abiotic/Biotic Factors		
SMART GOALS			
# of kids			
OUR REALITY			

SMART Goal Met? Yes No

Lesson Design Reflection:

Lesson Delivery Reflection:

What is our response for those students who DID NOT demonstrate learning?

What is our response for those students who DID demonstrate learning?

Plan for feedback, skill building and revision/retest:

Based on data, students need skill building support as follows:

	<i>Teacher A</i>	<i>Teacher B</i>
DATE		
DATE		

Date of Retest: _____

Liberty Middle School
CFA Data Form: Post-Assessment

After feedback, deployment and revision/retest: **SMART Goal Met?** Yes No

SKILLS				
SMART GOALS				
OUR REALITY BEFORE Deployment				
AFTER Deployment				

Deployment Student Reflection:

Deployment Self Reflection:

Deployment Team Reflection:

Science7 Guaranteed Standards Proficiency/Targets

Standard	Proficiency		Targets
<p>LS1-6 Scientific Explanation: Photosynthesis is</p>	<p>Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.</p>	<p>1</p>	<ul style="list-style-type: none"> → Matter → Atoms → Light Energy/ Chemical energy → Abiotic and Biotic Factors → Organism (Producer, Consumer, Decomposer) → Photosynthesis → Chemical Reaction → Reactants of photo → Products of photo → Metabolism → Cellular respiration → Locate evidence in text → Create a model of photo → Explain a model of photo → Cells → Cell organelles → Create a model of plant cell → Use a microscope to identify organelles

Cycle 1
Cycle 2
Cycle 3

Cycle 4
Cycle 5
Cycle 6

Guaranteed Standards EXCEED PROFICIENCY LS1-6

Standard	Proficiency	Targets
LS1-6 Scientific Explanation: Photosynthesis	Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.	Students will...

Science7 Guaranteed Standards Proficiency/Targets

Standard	Proficiency		Targets
<p>LS2-3 Model: Cycle of Matter + Energy</p>	<p>Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.</p>	<p>1</p> <p>2</p> <p>3</p>	<ul style="list-style-type: none"> → abiotic/biotic → Define ecosystem → Organisms → producer/consumer/decomposer → photosynthesis → Matter → Atoms → Molecules → Energy → Chemical Energy (stored energy) → Cellular respiration → Chemical reaction → Metabolism → Cycling of matter/energy → Cause and effect of relationships → Food Webs → Develop a model of an ecosystem → Explain the model and how matter and energy are cycling through the environment → Describe how disruptions to physical or biological components can lead to shifts in population

Cycle 1
Cycle 2
Cycle 3

Cycle 4
Cycle 5
Cycle 6

Science7 Guaranteed Standards Proficiency/Targets

Standard	Proficiency	Targets
LS2-3 Model: Cycle of Matter + Energy	Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.	Students will... <ol style="list-style-type: none">1. Define 3 environmental topics and correlate it to an example from the movie "The Lorax"2. For each topic they will give a real world example: "Water pollution, dumping oil in the ocean."3. Need to submit their answer sheet from the movie4. Need a resource on each slide5.

Science7 Guaranteed Standards Proficiency/Targets

Standard	Proficiency	Targets
<p>ESS2-1 Analyze Data: Natural Hazards</p>	<p>Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.</p>	<ul style="list-style-type: none"> → Earth's Layer → Define Rock → Define Minerals → Define the rock cycle → Igneous Rock → Sedimentary rock → Metamorphic Rock → Thermal energy → melting → crystallization → Water cycle → Weathering and erosion → Solar energy → Sedimentation and compaction → Heat and pressure → Thermal energy → Convection

Cycle 1
Cycle 2
Cycle 3

Cycle 4
Cycle 5
Cycle 6

Guaranteed Standards Targets PS1-2

Standard	Proficiency	Targets
ESS2-1 Analyze Data: Chemical Reactions	Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.	

Cycle 1
Cycle 2
Cycle 3

Cycle 4
Cycle 5
Cycle 6

Guaranteed Standards Targets PS1-2

Standard	Proficiency	Targets
PS1-5 Analyze Data: Chemical Reactions	Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.	<ul style="list-style-type: none"> → Matter/Mass → Energy → Atoms → Molecules → Elements → Law of conservation of mass → Substances → States of matter → Physical change → Chemical reactions → Chemical change → Reactants create a new substance/product → Coefficients/Subscript → Chemical equation → Balance equations → Define model → Create a model of an atom → Create a model of a molecule → Describe the LOC using a model

Cycle 1
 Cycle 2
 Cycle 3

Cycle 4
 Cycle 5
 Cycle 6

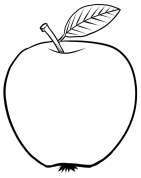
Guaranteed Standards EXCEED PROFICIENCY PS1-2

Standard	Proficiency	Targets
PS1-5 Analyze Data: Chemical Reactions	Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	Students will... <ol style="list-style-type: none">1. Complete the Element Baby Slides Notebook<ol style="list-style-type: none">a. Needs to be fully completed and with detailed notes including links to other outside resources and images they have found.2. Create a Poster of your Element Baby<ol style="list-style-type: none">a. Should include: all key parts of the Slide presentation, and an image (could be drawn or printed)3. Write an Essay about the chosen Element Baby<ol style="list-style-type: none">a. Should include all details from the Slides Notebook.b. A paragraph per topic based on the slides notebook

Science7 Essential Standards

Standard	Proficiency
LS 1-7	Develop a model to describe how food is rearranged through chemical reactions forming new molecules that support growth and/or release energy as this matter moves through an organism.
LS2-2	Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
ESS2-3	Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.
PS 1-1	Develop models to describe the atomic composition of simple molecules and extended structures.
PS1-5	Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.
PS1-6	Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.

August



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

1

2

3

4

7

8

9

Teacher
workday

10

Teacher
Workday

11

Teacher
workday

14

First Day of
School!!!!

15

16

17

18

21

22

23

24

25

28

29

30

31

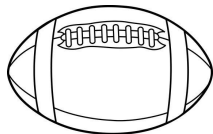
Week 1

Week 2

Week 3

Week 4

September



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

Week 1

4
No School
Labor Day

5

6

7

8

1

Week 2

11

12

13

14

15

Week 3

18

19

20

21

22

Week 4

25

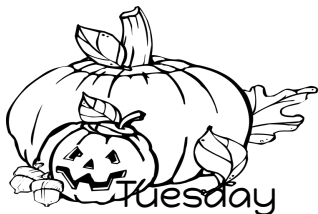
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27

28

29

October



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

2
Parent
Teacher
Conferences

3
Parent
Teacher
Conferences

4
Parent
Teacher
Conferences

5
Parent
Teacher
Conferences

6
Parent
Teacher
Conferences

9
No School
Columbus
Day

10

11

12

13

16

17

18

19

20

23

24

25

26

27
Teacher
Work Day

30

31

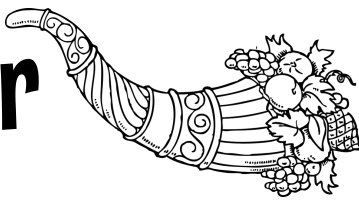
Week 1

Week 2

Week 3

Week 4

November



Pacing Guide

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 13			1	2	3
Week 14	6	7	8	9	10 Veterans Day
Week 15	13	14	15 Parent/Teacher conference	16 Parent/Teacher conference	17 Early out*
Week 16	20	21	22	23	24
Thanksgiving Break					
Week 17	27	28	29	30	

December



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

Week 16

1

Week 17

4

5

6

7

8

Week 18

11

12

13

14

15
Minimum Day

Yard Duty

18

19

20

21

22

CHRISTMAS BREAK

25

26

27

28

29

CHRISTMAS BREAK

January



Pacing Guide

	Monday	Tuesday	Wednesday	Thursday	Friday
	1	2	3	4	5
	CHRISTMAS BREAK				
Week 19	8 50% SMART GOAL CHECK	9	10	11	12
Week 20	15 MLK Day	16	17	18	19
Week 21	22	23	24	25	26
Week 22	29	30	31		

February



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

Week 22

1

2

Week 23

5

6

7

8

9

Week 24

12

13

14

15

16

Week 25

19
President's
Day

20

21

22

23

Week 26

26

27

28

29

March



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

Week 26

1

Week 27

4

5

6

7

8

Week 28

11

12
Parent
Teacher
Conferences

13
Parent
Teacher
Conferences

14

15

Week 29

18

19

20

21

22
Minimum Day

Week 30

25

26

27

28

29

SPRING BREAK

April



Pacing Guide

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 30	1	2	3	4	5
Week 31	8	9	10	11	12
Week 32	15	16	17	18	19
Week 33	22	23	24	25	26
	29	30			

May



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

Week 34

1

2

3

Week 35

6

7

8

9

10

Week 36

13

14

15

16

17

Week 37

20

21

22

23

24

Week 38

27
Memorial Day

28

29

30

31

June



Pacing Guide

Monday

Tuesday

Wednesday

Thursday

Friday

Week 38

3

4

5

6

7

Teacher Work Day

10

11

12

13

14

17

18

19

20

21

24

25

26

27

28

PRIDE Sentence Frames

Lining Up for Class

- *Student*, great job being on time to class. I love how **dependable** you are.
- I see that *Student A* is **prepared** to be successful today because he got in line right behind *Student B* with his shoulders directly behind him and his voice off.
- I see *Student* getting **prepared** to be successful today by taking her materials out of her backpack, nice job.
- I appreciate the way that *Student* showed **integrity** by joining our line and stopping the conversation she was having.
- I see that *Student* is being **respectful** of our class time by being **prepared** for class and waiting silently in line.
- I can see that *Student* is **prepared** to show great **effort** today because he has all of his materials out for class and he's ready to go.
- I love the **effort** that *Student* is putting in to being **prepared** for class today. He's silently getting his materials from his backpack, nice job.

Entering Class

- Thank you *Student* for getting **prepared** for success today by grabbing the handout from the basket.
- Thank you *Student* for being **dependable** and following the path into class.
- I appreciate *Student's* **integrity** as he entered class with a voice off.
- I appreciate the way that *Student* put the **effort** into quickly getting to his seat to start our warm up.
- I love the way that *Student* is **respectful** of those around her by silently working on her warmup.
- I really love the **respect** that *Student* is showing us and our classroom by entering our class silently.
- I can't help but notice how **dependable** *Student* is. He entered class with a voice off, he got **prepared** for class, and now he's in his seat working on his warm-up. Way to go!

During Class

- I appreciate the way that *Student* showed **integrity** by admitting they need help. Thank you for your honesty and showing an **effort** to get better and learn.
- Thank you *Student* for being **respectful** of our time by standing quickly when your name has been called.
- I love that *Student* was **prepared** with a response when his name was called. Excellent job.
- I really appreciate the **respect** that *Student A* was showing *Student B* by keeping her voice off as he spoke and giving him her full attention.
- I really like the **effort** that *Student* is showing with his body posture, he's sitting upright with his hands free. I can see that he's **prepared** to be successful today.
- I see that *Student* is **prepared** to read with me because her eyes are already up on our screen. Nice work!

PRIDE Sentence Frames

During Class Continued

- I love how **dependable** that *Student* is, I can see her sitting upright as we read and following along with me.
- I love the **effort** from *Student*. I could hear his voice loud and clear as we read aloud.
- I love seeing the **effort** from *Student*. He picked up his pencil and started writing immediately.
- I love that *Student* is putting **effort** into response by using a complete sentence.
- Nice job, *Student*, being **respectful** by putting your pencil down immediately when I asked.
- I really like the way that *Student* is showing **respect** to his partner by turning his body towards her as they pair-share.
- I love how **dependable** *Student* is. They're quickly and silently passing their paper up to the person in front of them.

Packing Up/Exiting Class

- I see that *Student* is being **respectful** of his row by keeping his voice off and waiting patiently to be dismissed.
- I appreciate the way that *Student* showed **integrity** by returning the pencil she borrowed.
- I really like the way that *Student* showed **respect** to our classroom by pushing in his chair.
- *Student* is showing me they're **dependable** because they silently grabbed their backpack and returned to their pushed-in chair. Nice job.
- *Student* is showing me he's **prepared** to continue being successful today because he's waiting silently behind his pushed in chair to be dismissed.

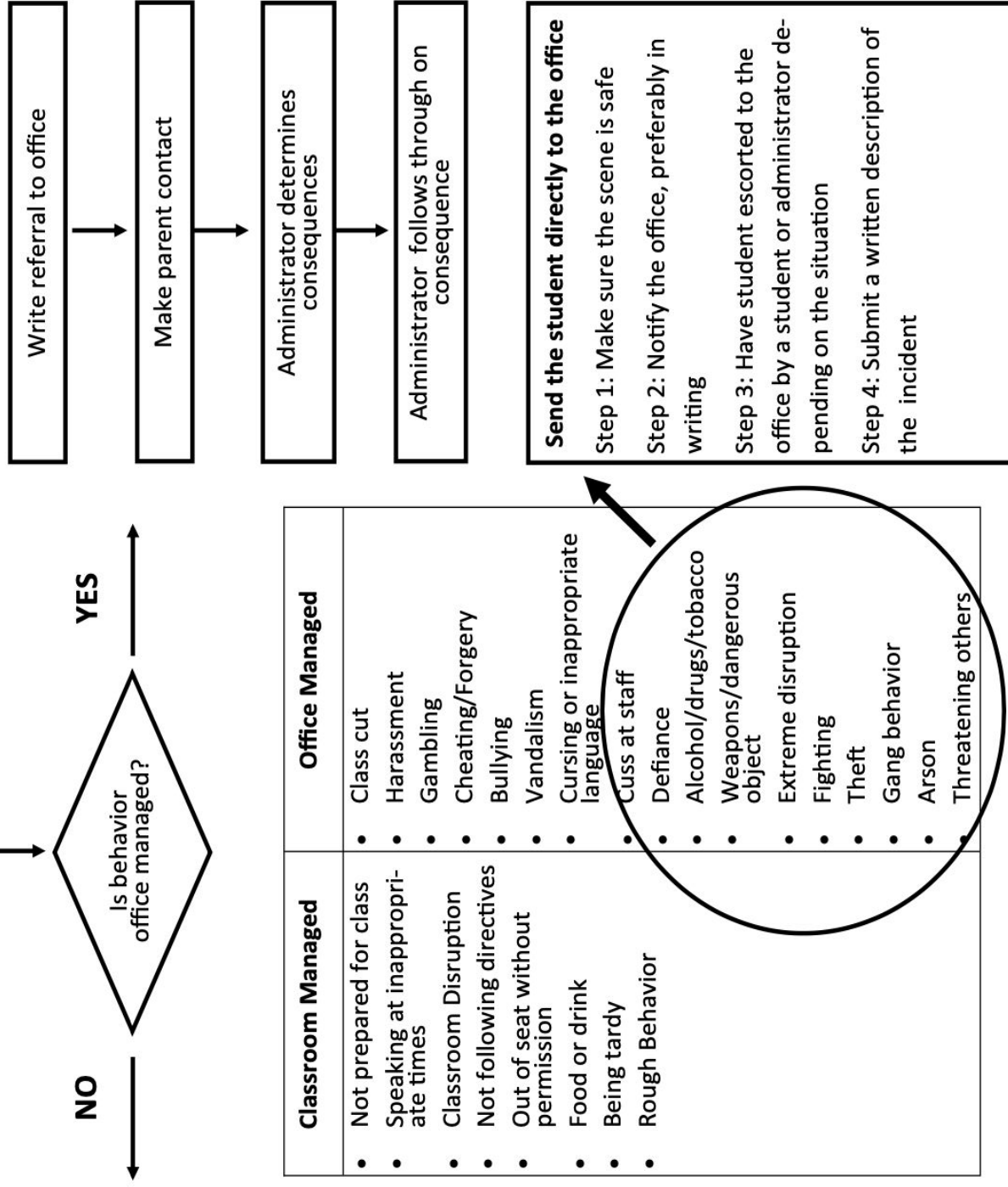
ELL Student Strategies

1. **Please seat the EL Student in close proximity to teacher** - not necessarily in the front, but closest to where you tend to stand - this way as students are pair-sharing you can do a quick check to make sure they are also sharing.
2. **Strategic partner** - Seat them with a stronger partner who will hold them accountable and make the EL Student participate - even if it is re-reading the sentence or repeating after them, the EL student should not be able to check-out, and the other partner be accountable for all the work.
3. **Give the EL student a copy of the notes, hand out or lesson** - I know sometimes handouts are coming after you give them a small introduction but for our 1s and 2 students they need something concrete that they can look at with examples, pictures and/or definitions.
4. **Definitions** - if possible - give any vocabulary in student-friendly language with pictures and examples.
5. **Call on them to participate (non-volunteer)** - this is where you would "fake" the stick and call on an EL student to read the objective or definition, something you know they should be able to read, so that they can have some success during the lesson.
6. **De-escalate the questions** for them when you call on them, it can be a possible "yes or no" answer or "is it this or that" type of answer with two options.
7. **Give them a sentence frame or sentence-starter** as you are having them pair-share to help them get started, many times they can't share because it takes them longer to find the words.
8. **Give them a copy of the writing/notes before or after**, it takes them longer to process the language so sometimes as you guys are writing, they don't get all of the information. You can print a copy and have them hi-light or give them notes after whole class writing, or do close-notes where they fill in the blanks.

Behavior Flow Chart

Observe Problem Behavior

Warning/Conference with Student



Strategies

- Re-teach of appropriate behavior
- Request Change in behavior
- Invitation to self-correct
- Modify Assignment
- Teacher proximity or visual prompt
- Student reflection (Think sheet)

Complete Step Form & Actions

- Step 1: Warning
- Step 2: Conference with student
- Step 3: Lunch Detention
- Step 4: Lunch detention & parent phone call
- Step 5: Step form sent to the office and parent phone call

Student Reset (10 min max)

Step 5

Write the student a referral

TAPPLE Teaching Strategy

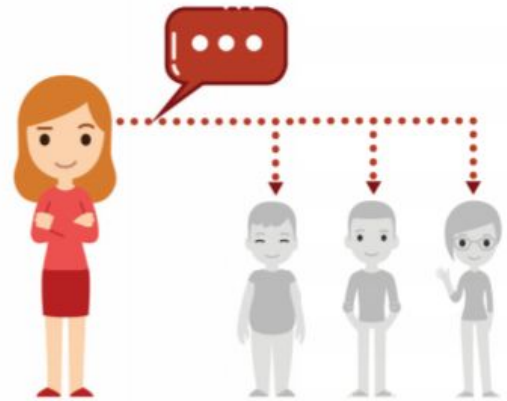


LESSON DELIVERY

Verify students are learning while you're teaching!

T **Teach First**

before you ask the question so students are equipped to respond.



A **Ask a Question**

specific to what you just taught.

P **Pair-Share**

with a partner so students practice their response to the question.



P **Pick a Non-Volunteer**

randomly to verify that everyone is learning.

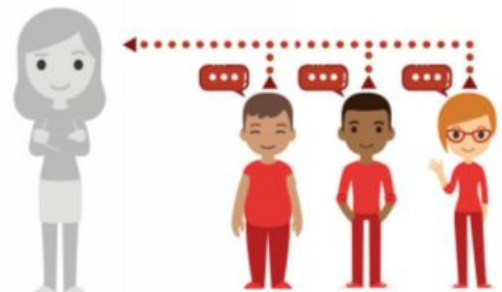


L **Listen**

to student responses so you can make real-time instructional decisions.

E **Effective Feedback**

Elaborate, explain or reteach based on student responses.



EDI Lesson Template Example

<https://docs.google.com/presentation/d/1sMDnaJaUEnj33Y5zU8xqWPwsylAiY3tht yyqTglirK4/edit?usp=sharing>

Authentic Literacy Lesson Template Example

<https://docs.google.com/presentation/d/1Scp7G6Y-whtzFlxp0HzgE2g3TmM1aRYy5 ARwQspF09Q/edit?usp=sharing>

LIBERTY MIDDLE SCHOOL - Science7 - PLC Agenda

Date: February 01, 2021

Location: Zoom

*"Unity is strength...
when there is teamwork
and collaboration,
wonderful things can be
achieved."
--Mattie J.T. Stepanek*

Members:

- Carlee
- Juan
- Andrea

Four Essential Questions:

1. What do we want students to learn?
2. How will we know when they've learned it?
3. What will we do when they have learned it?
4. How will we support those students who have not learned it?

Team Vision: It is the vision of the Liberty Middle School science team that students will be ingrained with excellence, and will be empowered to solve problems, and view challenges as opportunities to overcome life's obstacles.

Team Norms:

- Members will be on time, meeting starts at 1:50 pm.
- Team members will maintain a positive attitude during meetings.
- Team members will be prepared. Anything you have been tasked with should be done and brought to the meeting.
- After all voices are heard, decisions are made by consensus at an agreed upon deadline.
- Team members will have lessons/handouts completed and shared to members by Sunday at 5pm.

Response to Violation of Norms:

- Remind Team of Norm
- Private Conversation
- Administration

SMART GOAL:

To prepare for this meeting: Have IRR completed for End of Cycle 7

TIME	TOPIC	FACILITATOR
5 min	Norms & What is good?	Villarreal
<i>Essential Question 2</i>		
10 min	IRR for End of Cycle 7 CFA	Chandler
<i>Essential Question 3 & 4</i>		
10 min	Discuss ILT	Chandler
<i>Essential Question 3 & Essential Question 4</i>		
20min	Adjust & Finalize End of Cycle 8 CFA	Chandler
<i>Essential Question 2</i>		
If we have time	Discuss Creating Proficiency Exemplars for each standard with student samples. (See Example)	Chandler
5 min	Review assigned tasks and decisions. Also finalize next meetings goals	Flores