

Grade Level	3	School(s)		District	<i>Chino Valley Unified School District</i>
Timeline:		Topic:		NGSS PE(s)	Instructional Segment 2: Life Cycles for Survival (Framework Chapter 4 pg. 23) 3-LS-1: Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death
CA Science Framework: https://www.cde.ca.gov/ci/sc/cf/cascienceframework2016.asp (Look to Chapter 11 for information on 5E Lessons)					
DCI focus(es)	LS1.B: Growth and Development of Organisms		CCC focus(es)	CCC-1: Patterns	
Engineering			SEP focus(es)	SEP-2: Develop and Using Models	
EP&Cs			H-SS		
ELA/ELD			Maths		
Arts			Social/ Emotional		

LEARNING SEQUENCE PLAN

<p>ENGAGE</p> <ul style="list-style-type: none"> • Phenomena • Questioning • Prior knowledge 	<p>Corn Time-Lapse (video duration 0:59)</p> <ul style="list-style-type: none"> • Have students watch the video with audio or without and document in their science notebook: <ul style="list-style-type: none"> ○ What they notice (evidence-based observations) ○ What they wonder (ask questions) ○ What the video reminds them of (connect to past experiences) <p>Teacher facilitates a whole class discussion of the phenomena video</p>
<p>EXPLORE</p> <ul style="list-style-type: none"> • Build own meaning • Tinker • Models 	<p>Inquiry Walk</p> <ul style="list-style-type: none"> • Have students walk the campus and focus on: <ul style="list-style-type: none"> ○ What can you connect to our phenomena? ○ What organisms can you find? ○ What are their lives like? • Set time limit for students to come back • Students write their observations in their science notebook <p>Table Cloth Activity (click link to access the 4 pictures of animals)</p> <ul style="list-style-type: none"> • The activity is silent • Students investigate the pictures at each station • Students document their thinking at each station to process the information (observations, questions, drawings/models) • Students can comment on others' comments • Teacher notify students when to rotate to the next station



	<ul style="list-style-type: none"> • At the end of the activity students come together for a class discussion • Teacher calls on students to share pictures at each station: <ul style="list-style-type: none"> ○ What have we learned? ○ What questions do you have? ○ What actions do we want to take? <ul style="list-style-type: none"> ▪ At the end of the discussion, the class should generate the big idea or topic they will be learning = life cycles • Students document the class discussion in their science notebook • Students reflect on the table cloth activity in their science notebook by answering these questions: <ul style="list-style-type: none"> ○ What can you connect to our phenomenon?
<p>EXPLAIN</p> <ul style="list-style-type: none"> • Communicate understanding • Apply vocabulary • Research • Models 	<p>Create a model</p> <ul style="list-style-type: none"> • Have students think back to the phenomena video, inquiry walk, and the tablecloth activity • Students will work with classmates in groups of 2-3. Before working in groups, assign students an organism <ul style="list-style-type: none"> ○ Butterfly, frog, fruits and seeds, and sea turtle • Students independently draw a model in their science notebook about what they know about the organism's life cycle. • Suggestion: use one color (like pencil or black ink) <p>Readings</p> <ul style="list-style-type: none"> • Close Reading Procedures: <ul style="list-style-type: none"> ○ Students read the article first ○ Students go back and circle important, new, and unknown words ○ Students underline one important sentence ○ Students can annotate (validations, questions, reminds me of...) • Have students close read the life cycle articles for their assigned organism <ul style="list-style-type: none"> ○ Butterfly Article 1 and Butterfly Article 2 ○ Frog Article 1 and Frog Article 2 ○ Fruits and Seeds Article and Plant Article ○ Sea Turtle Article <p>Revision of Model</p> <ul style="list-style-type: none"> • Allow students to add/change their original model in their science notebook after reading • Students need to include vocabulary and new concepts that they learned • Suggestion: use a different color than before <p>Build a Collaborative Model</p> <ul style="list-style-type: none"> • Students share their model with classmates that were assigned the same organisms in groups of 2-3 (students with butterflies share with each other, students with frog share with each other, and students with plants share with each other) <ul style="list-style-type: none"> ○ What aspects of the individual models could apply? • Create a shared model on chart paper that shows the life cycle of the organism students have been studying <p>Shared model will be displayed in a gallery walk around the room</p>
<p>ELABORATE</p> <ul style="list-style-type: none"> • Apply to new contexts • Make connections • Models • Engineer 	<p>Writing through Claim, Evidence, and Reasoning (CER)</p> <ul style="list-style-type: none"> • Driving Question: What would happen if there were no more births (animals) or seeds (plants) for your organism? <ul style="list-style-type: none"> ○ Students independently write a CER in their science notebook ○ Optional: CER sentence frame



	In their collaborative groups, students create one CER and add it to their collaborative model
<p>EVALUATE</p> <ul style="list-style-type: none"> • Notebooks • Models • Rubrics • Performance Task • Claim, Evidence, Reasoning 	<p>Gallery Walk</p> <ul style="list-style-type: none"> • Students provide feedback to other classmates' collaborative models <ul style="list-style-type: none"> ○ Students write on Post-its what they notice and what they wonder about their classmates' model • Teacher notifies groups when to rotate or sets the amount of time for students to leave feedback for their classmates • After groups have visited all the collaborative models, students go back to their original poster <ul style="list-style-type: none"> ○ Students review and reflect on the feedback provided by their classmates ○ Ask students: What would they add or change in their model or CER?

