Lesson Plan Template Date: September 2020

Grade: k-5		Subject: Science
Materials:	Forks, beans, sheet, spoons, spork, Popsicle Sticks, dixie	Technology Needed: Timer
Instruction	al Strategies:	Guided Practices and Concrete Application:
 € Direct € Guide € Socrat € Learni € Lectur € Other 	instruction€Peer teaching/collaboration/ cooperative learningd practicecooperative learningcic Seminar€Visuals/Graphic organizersng Centers€PBLre€Discussion/Debate(list)€Modeling	 € Large group activity € Hands-on € Independent activity € Technology integration € Pairing/collaboration € Imitation/Repeat/Mimic € Simulations/Scenarios € Other (list) Explain: Kids will participate is an activity where they test the effectiveness of different "beaks" when catching "prey" through a simulation with beans and different utensils
Standard		Universal Design for Learning
		For younger Students:
3.LS4.B: I	Natural Selection -Sometimes the differences in	provide many examples and connections to animals and things
characte	ristics between individuals of the same species	that are familiar to them to help them visualize and connect
provide a	idvantages in surviving, finding mates, and	concepts.
reproducing.		for Older Students
Objective		challenge older students with further questioning as to how
By the end of this lesson the students will understand why different forms and functions of traits of animals in the same species give some an advantage in survival through the completion of a simulation game. Bloom's Taxonomy Cognitive Level: understanding, Applying, analyse		different attributes might affect survival, reproduction, and populations. Modalities/Learning Preferences: • Visual: Anchor Chart • Auditory: Verbal explanation • Kinesthetic: Bean Challenge • Tactile : Hands on activity
Classroom	Management- (grouping(s), movement/transitions, etc.)	Behavior Expectations- (procedures/expectations specific to the lesson, rules and expectations, etc.)
		 Don't put the beans in your mouth, ears, nose, or anywhere put the tarp and the cup! keeping hands and utensils to ourselves
Minutes	Procedures	
	Set-up/Prep before lesson:	
2 minutes	 set up posters. lay out the different utensils the students will be 	e using.
minutes	3. Set up blanket, beans, and rocks to act as the "p	rey and landscape"
	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)	
	 "good afternoon friends. Have any of you ever seen a dog with webbed feet, or a horse with feathers, or a parakeet with hooves. Can you imagine how silly this would be. Why do you think this is that dogs don't have webbed feet, horses feathers, and parakeets hooves?" allow students time to answer. say those are all good answers thank you for your ideas. 	

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Explain: (teacher-led)			
1. start by introduci	ng the activity		
a. "ok frie form an booves	nds today we will be learning m d the function of different trait webbed feet, and feathers"	nore about how animals survive in the wild. We will be focusing on the s. If you look at this poster you will see three different types of traits.	
b. "Now ra	ise your hand and wait for me	to call on you if you can give me an example of an animal that has	
i.	allow students time to think a any wrong answers but saying write students examples on a	and call on a few. Affirm students who give correct answers and correct g thanks for your response. nother poster.	
c. "these a	re all great examples of animal	Is that have hooves, which is the form of this trait".	
d. "now w i.	hy do you think these animals v allow students time to think a	were given hooves instead of webbed feet, what is their function". and call on a few. affirm students who give correct answers and correct	
ii.	any wrong answers but saying write students' responses on	g thank you for your response. another poster.	
2. repeat this proces	s done on hooves for webbed f	feet and feathers.	
3. "now friend I war	t you to think about birds, do k	pirds have mouths? "	
a. "your ri b. "Yes the	ght birds have beaks, why do yo y use their beaks to catch food	ou think birds have beaks and why are birds beaks shaped differently". "	
4. "now we are goin	g to do an activity to test how o	different beaks would catch prey".	
1. "Ok frie do you	 "Ok friends now we are going to transition to around this blanket when i say go. When you get to the blanket, do you think you should touch anything?" wait for no. "ok go" say "Friends we are going to play a game, and pretend that you all are birds, and these beans are the prey. I'm going to be giving you all these cups, which will be your stomachs. Now your job is to get the beans or prey, interventence the prey. I'm 		
2. say "Fri going to			
3. ask" Bu utensils	r stomacn, cup." : friends, do bird use their hand that I give you. The utensils are	ls??" wait for a response. "No they use beaks. So you will be using e different shapes so some of you might have a hard time catching	
prey. Bu 4 say "No	t don't worry, you'll have a cha	ance to try with another "beak"."	
up that	many fingers and stay seated."	Count off students	
5. ask "M out fork	y one's can you raise your hand s and popsicle sticks. Remind si	is." pass out spoons to group one. Repeat with groups 2 and 3, passing tudents not to begin.	
6. say "no cup, usi	w I'm going to set a timer for 1 ng only your "beak".	minute, and youre going to try to get as many beans, or prey, into your	
Elaborate: (concreate pract	ice/application with relevant le	earning task -connections from content to real-life experiences)	
7. Set time	7. Set timer, and complete activity.		
8. Once th they go Repeat	 Once the timer beeps, ask all students to stop catching prey. Now ask each student to count how many prey they got. "With a raise of hand, can someone share how they did" Ask student what type of utensil they had. Repeat a few times getting examples from all three groups. Lead the conversation towards identifying what the most effective "beak" was. Repeat the activity if there is time and if students wish to. Ask "now boys and girls I'm going to go back to the question we talked about before. Why do you think birds back are showed the way they are 2". 		
9. Lead the			
10. Repeat			
beaks a 12. Lead the feature. would h importa	 beaks are shaped the way they are?" Lead the conversation towards the fact that the beak's shape helps them catch prey and eat. So the beak, a feature. Has what function?" Reiterating the function of the beak's shape is to catch and eat prey." What would happen if there was a bird with a beak shaped like the popsicle stick?" Guide conversation towards the importance of certain features for survival. 		
Closure (wrap up and trans 1. say "Now my frie the next leader".	ition to next activity): nds if you would please dump a	III the beans back and once you are finished wait for instructions from	
 Formative Assessment: (linked to object Progress monitoring throughout le learning, data collection) 	tive, during learning) sson (document of student	Summative Assessment (linked back to standard, END of learning)	

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Teacher Reflection (What went well? What did the students learn? How do you know? What changes would you make?):

The lesson went really really well. The students in the learning center really grasped the concepts of structure and function. They were able to think critically about why certain animals had certain structures. They made connections between an animals habitat and the features they had to help them survive better. The second part of the lesson was a hands on activity that explored the relationship with between the food an animal ate and the features they had to help them acquire that food.

If I had to teach this again, I would definitely be more intentional about the groupings of students. The experiment involved some groups succeeded above and beyond at "catching prey", and other doing not so well. Some of the students took this personally, even through each student had a chance to use each tool. I might find a way to have them observe this outcome without directly participating in it. Most students handled this fine, however some were very discouraged and I believe that inhibited further learning of the concept.