					Cral	o Aq	uari	um	Cha	llenge	7DVM
NAME:	DATE:										
STUDENT #:	TEACHER:										
Mating and Predator Investigation Sheet for Data Trial 1											
Write the name of the person in your group who will be counting and recording each predator below.											
Croaker Predate	Croaker Predator Group Member Name										
Red Drum Pred	ator	C	Group I	Nembe	er Nam	e					
Sea Turtle Pred	ator	(Group I	Nembe	er Nam	e					
Pocord your data in the	o hove	na hala	w and	ooloul	oto tho	data a	lifforon	ooc fo	r oach	variabla	
Record your data in the			w anu	Calcula		uala u			each	i vanabie.	
Crab Mating Event Da	<u>ata</u>										
	ſ	77	74	74	74	74	\frown	\frown	\cap		
Crab Pheromone Concentration (%)	20	30	40	50	60	70	80	90	100		
Number of Crab Mating Events											
	1	J١	J١	Jt	Jt	Jt			J		
Predator Event Data											
Circle the name of you	r pred	ator:	(Croake	er	Re	ed Drui	m	S	ea Turtle	
	ſ)[) () ()/					
Crab Pheromone Concentration (%)	20	30	40	50	60	70	80	90	100		
Number of											
Predator Events	•] 1]\$	14	11]\$	ハ	11	,		
When your group mem	bers s	share 1	their pr	edator	s, write	the da	ata diffe	erence	e analy	/sis for ea	ch predator.
Croaker Predate	or:										
Red Drum Pred											
Sea Turtle Pred	ator: _										
This curriculum is produc G							(AMP-IT-UP), athematics, an				089.

								C	Cra	ıb	A	qu	lai	'iu	m	С	ha	alle	en	ge		7[DV	Μ
NAME:	DATE:																							
STUDENT #:	TEACHER:																							
Results Graph for Data Trial 1																								
Look at your <i>Mating and Predator Investigation Sheet for Data Trial 1</i> and transfer your data from the table into coordinate pairs for the crab and your predator.																								
Crab:(,)(_	,) (,)	(_	_,	_) (,)	(_	,	,)(_	, _)	(_	, _)	(_	,		_)		
Predator: (,) ((,		.) (_	, _) (.,	.) (_	, _)	(,)	(_	_, _	_)	(_	_, _	_) ((,)	
Place a dot on the												-											-	L
selected. Make su	e lo	WII	ie ii		ame	011	ne l	Jieu	aloi	01		u əl	air			uie		gen	ub	UX	Dei	Ow.		
					Aqua	rium (Challe	nge R	esults	Gra	ph (l	Data	Trial	1)										
□ Blue Crab	□F	Preda	itor:				_																	
34 33										-	_				-						-			
32 - 31 - 30 -										-											+			
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24 23 22 21 21																								
21 - 20 - 21 - 21 - 21 - 21 -																								
H 18+ Jo 17+		_													-	_					+	_		
16- 15- 11- 14-		_																						
Z 13- 12- 11-		_								_					-	_	-				+	_		
10- 9-										_												_		
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04 0	5	10	15	20) 25	5 3	03	,5 A	0 1	4 5	50	55	6) (55	10	15	80	8	5	90	95	100	
								Crat	o Pher	omo	ne C	Conce	ntratio	on (%))									
This curriculum is			Advance Institute																Award	#1238	089.			

					Cral	o Ac	Juari	um	Cha	llenge	7DVM
NAME:	DATE:										
STUDENT #:	TEACHER:										
Mating and Predator Investigation Sheet for Data Trial 2											
Write the name of the person in your group who will be counting and recording each predator below.											
Croaker Predator Group Member Name											
Red Drum Pred	ator	(Group	Membe	er Nam	e					
Sea Turtle Pred	ator	(Group	Membe	er Nam	e					_
Record your data in the boxes below and calculate the data differences for each variable.											
	1	γ	74		γ		\cap	\cap	0		
Crab Pheromone Concentration (%)	20	30	40	50	60	70	80	90	100		
Number of Crab Mating Events											
j	1	八	Jt		1	J1			V		
							-	-	-		
Predator Event Data	_			. .		_			•		
Circle the name of you	r Prec	lator:		Croake	er	R	ed Dru	m	Se	ea Turtle	
		\mathbf{M})[$\boldsymbol{)}$		11					
Crab Pheromone Concentration (%)	20	30	40	50	60	70	80	90	100		
Number of											
Predator Events											
	L	八	ハ	ハ	ハ	ハ	ハ	ハ	J		
When your group mem	bers	share	their p	redator	s, write	the ra	ate of c	hange	for ea	ch predate	or below.
Croaker Predate	or:										
Red Drum Pred											
Sea Turtle Pred											
This curriculum is produc	ed by Adva	nced Manufa	acturing & Pr		grated to Unlo	ck Potential	(AMP-IT-UP)			ntion Award #12380	89.

				Cra	ıb Aq	uariu	m Ch	nallenge	7DVN	
NAME:					DATE:					
STUDENT #:	TEACHER:									
Results Graph for Data Trial 2										
Look at Data Trial 2 and transfer the data from the table into coordinate pairs for the crab and your predator.										
Crab: (,) (,) (,) (,) (,) (,) (,) (,) (,)										
Croaker: (,) () (,) (
Red Drum: (,										
Sea Turtle: (,)										
Place a dot on the		e pair val	ues for th	ne Crab	Mating	Event ar	nd the P	redator Even	t. Be sure	
to color code your	legend.	A cu	arium Challer	ngo Deculto	Craph (Data	Trial 2)				
□ Blue Crab	🗆 Croaker			Sea Turtle	Стари (Data	111ai 2j				
³⁴ 33				<u> </u>			<u> </u>			
32 - 31 - 30 -										
29 28 27 27						+				
26 25										
26 25 24 23			+	\vdash		+	+			
22 21 31 20										
– 19 – 19 – 18										
21 20 19 19 18 17 17 16 15 14 13 13										
15										
$12 \\ 11 \\ 10 $										
9+ 8-						+				
7										
4+3+										
2+ 1+							+			
0 + 0	5 10	15 20	25 30 3					15 80 85 90	0 95 100	
				Crab Pher	omone Conce	entration (%)	1			
This curriculum i	s produced by Adva	anced Manufacturi	ng & Prototyping	integrated to Ur	nlock Potential (A	AMP-IT-UP), Nat	ional Science F	oundation Award #123808	9.	

	Crab Aquarium	Challenge	7DVM
NAME:	DATE:		
STUDENT #:	TEACHER:		
Recomr	mendation Letter		
Write a letter to the aquarium staff at the Georgia A you want to put in the crab tank at the new exhibit. costly to the aquarium and would be unethical to the challenge to support your decisions.	As you know, putting in the	wrong combination w	ould be
Dear Aquarium Staff,			
I am writing you today to share some recommendate want to create a balanced ecosystem within the taken the taken to create a balanced ecosystem within the taken balanced ecosystem balanced ecosystem within the taken balanced ecosystem balan		-	
predator(s) into the tank with the blue crab:			
If you look at the graphed data you can see a			
this	s means		
This is different from the		, which have a	l
relationship meaning			
You can also look at the data tables that show a	rate of cha	nge between our	
recommended tank dwellers. In fact, the rate of cha	ange we calculated was		
This means			
Do i	not hesitate to contact me if y	ou have any further	questions.
Sincerely,			
This curriculum is produced by Advanced Manufacturing & Prototyping I Georgia Institute of Technology's Center for Edu	ntegrated to Unlock Potential (AMP-IT-UP), National cation Integrating Science, Mathematics, and Compu).