Grade 4 Term 2, Week 9 LESSON PLAN — Explicit Teaching	
Name of Lesson	Dynamics: Effects of Push and Pull on Objects
Learning Area/s	Science

Designed by Teacher/s	Teaching Hub
Designed for which G	4

radeLevelandSection						
No.ofSessions	**Session1**	**Session2**	**Session3**	**Session4**	**Session5**	
Ref	• Dep Ed Gra					

erences (books, websites, toolkits, etc.)	de 4 Science Learner's Material, Unit 3: Force and Motion. • Toy cars, rubber balls, marbles, and rulers. • Classroom objects: Books, eras

	ers, plastic bottles. • Worksheets: 'Push and Pull in Action' and 'The Speed Challenge'. • Video clip: 'How Soccer Players Control the Ball

	' (DepEd Portal or similar).
Declaration of AI use Citehow AI was used	Artificial Intelligence (AI) tools were used to assist in the preparation of this lesson plan, particularly in generating ideas, improving clarity of instructions, and organizing learning activities aligned with the MELCs. All AI-assisted outputs were carefully reviewed,

edintheformulationoftheLessonPlan.SeeDO3,2026Annex	validated, and contextualized by the teacher to ensure accuracy, appropriateness, and alignment with DepEd standards.

A.	
Intentions.	Meaningful learning experiences are anchored in how we frame them. Start by deciding what you want learners to master by the end of the lesson - keep it clear and simple. Remember: Understanding your learners' evolving context and designing around it help ensure that your lessons connect with and are relevant to them.

Learning Competency: Write the competency/ies for	SCIENCE: Apply knowledge and skills related to participate in guided activities to demonstrate that pushes and pulls can be used to change the speed and direction of an object including making it go faster, turn it to a different direction, slow it down, and stop it

mthecurriculumthatwearetargeting,andthecontentorper

formancestandardsapplicabletothesession.	
Learnin	Identif Explain Showthr Determi Applyco

gObjectives: Writethesmallerknowledge,skills,orttyanddemonstratehowapushorpullstartsthandemonstratehowapplyingmorforceintroughguideddactivitieshowopposingforcesneanddemonstratehowforceappliedfromtmbinedskillstomanipulateanobjectthrou

asksfromthecompetencythatthelearnerswillworkonandbe

emotionofastationaryobject.

hedirectionofmotionmakesanobjectgofas

canslowdownorstopamovingobject.

hesidecanchangethedirectionofamoving

ghanobstaclecoursebychangingitsspeeda

Learner Context	Grade 4 learners in the Philippines are transitioning from concrete to functional understanding of physical science.

ableto showby the end of the session.		ter.		bject.	nddirection.

t: Write your observations of your learners, and how they ha	They are familiar with everyday movements but need structured vocabulary (speed, direction, force) and scientific reasoning to explain why objects behave differently when pushed or pulled. The activities leverage household and classroom materials to ensure accessibility.

verbeenperformingorrespondingtolearningexperiencesre

cently. Includes strengths, interests, and possible barrie

rstolearning.	
LearningExperience.	A learning experience is like a thoughtfully designed journey. Each activity and interaction builds towards meaningful understanding and growth. Identify activities and interactions to help learners gain knowledge, skills, or understanding in a

	purposeful way.				
Pre-Lesson: Describe how you will help the learner	Prepare 'Force Box' containing a toy car	Print 'Speed and Direction' activity sh	Set up flat, clear space on the floor for	Create vocabulary cards for: Push, Pull	Assign small groups for collaborative g

sgetreadyfortheleson.	r, arubberball, aspponge, andawoodenbloc	eetsforeverystudent.	rollingobjects.	, Speed, Direction, Friction.	uidedpracticce.

Flow: Describetheactivitiesthatyoucanimplement	k. **Review(5minutes):** Recallpreviousrequisit	**Review(5minutes):** Recallpreviousrequisit	**Review(5minutes):** Recallpreviousrequisit	**Review(5minutes):** Recallpreviousrequisit	**Review(5minutes):** Recallpreviousrequisit

information sessions to meet the learning objectives. Apply t
eknowledge. Teacher asks: 'Look around. Wh
eknowledge. Teacher pushes at toy cars slowly
eknowledge. 'Yesterday we made things fast
eknowledge. Quick fire: 'Push same way = fas
eknowledge. Summary of the week: Start, Fas

heLearningDesignPrinciples...

atobjectsaremovingrightnow?Whatdidyou

.'Whatdidwelearnyesterday?Whatmadethi

erHowdidwedothat?'(Appliedmoreforce)

terPushopposite=stop.Whatifwepush

ter,Slower/Stop,ChangeDirection.Teach

	do to make you bag move this morning? 'Stude	scar move? 'Review' Force' and 'Motion'.	. 'Today, we look at the opposite. ' **Motivat**	from the side? ' **Motivation/Engagement(5**	erusesh and signals for each. **Motivation/**

	ntsshareobservationsaboutmovingobject	**Motivation/Engagement(5minutes):** Meani	**ion/Engagement(5minutes):** Meaningfulho	**minutes):** Meaningfulhook.' PaperFootbal	**Engagement(5minutes):** Meaningfulhook.'

	sinthecl assroomlikeaspinningfanorasli
	ngfulhook.Twostudentsareaskedtopartic
	ok.Teacherrollsaballacrossthefloorand
	l'.Studentstrytoflickatriangleofpaper
	TheGreatMarbleChallenge'.Teachershows

	dingchair. **Motivation/Engagement (5min**	ipatein a 'Balloon Race'. One blow sent yo	letsitthitapileofsandorathickrug.' Why d	.Teacherthentriestoo'deflect'thepaperw	anobstaclecoursemadeofbooks, pencils, a

	utes): Meaningful hook. A 'Mystery Box' isp	naballoon, the other blows hard. The class so	idits top? I didn't touch it!' Leads into 'Op	hileitismovingbyblowingfromtheside.	ndcups.' Today, youarethemasterso fforce

	placedonthetable.Onestudentisaskedtomo	bserveswhichoneroeachesthefinishlinefi	posingForces'.**LessonPresentation(5mi**	**LessonPresentation(5minutes):**Objectiv	**!'LessonPresentation(5minutes):**Objec

	veitwithouttouchingthesidesr	rst. **LessonPresentation(5minutes):** Obj	**nutes):** Objectives: Demonstratesloweringd	es: Changethedirectionofanobject. Keyte	tives: Applycombinedskillstonavigatean

	alizes they must either 'push' or 'pull' ah	ective: Demonstrate how force make object	ownand stopping objects. Key terms: Friicti	rms: Direction (path and objects), Tu	object. Key terms: Navigation, Control. Ex

	and leo rro pe to mo ve it . Th is in tro du ce s th e
	ts go fa st er . Ke yt er ms : Sp ee d (ho w fa st an ob
	on (fo rc et ha tr es is ts m ot io n) , St op (en d of
	r n (ch an gi ng th e pa th) . Ex am pl e : A so cc er pl
	am pl e : Dr iv in g a ca r th ro ug h tr af fi c in vo lv

	Lesson Pre	jectmoves), Acceleration (increasing spe	motion). Example: Using brakes on a bicycl	ayerkicking a ball passed to them to other goa	eseall the force changes we learned. **IDO—Te**

	sentation (5 minutes): Objectives: Identi	ed). Example: Pedaling a bike harder makes si	e. **IDO—Teacher Modeling (7 minutes):** Teac	l. **IDO—Teacher Modeling (7 minutes):** Teac	**acher Modeling (7 minutes):** Teacher navigа

	fypushandpull. Keyterms: Force(apushorp	tzoom. **IDO—TeacherModeling(7minutes):**	herrollsatoycar. Toslowitdown, theteach	herrollsaballstraight. Whileit'smoving	tesatoycarthroughtwo'cones'(erasers).

	ull), Motion(changeinposition). Example	Teacherusesaramp andaball. 'If Igivethe b	ergentlyplacesafingerinfrontofit. Tost	, theteacherusesarulertotapthesideofth	'First, Ipushtostart(Motion). Ipushhard

	:Pushingaswingorpullingadrawer.Explai	allasmallpush,itmovesataslowspeed.If	opit,thetteacherblocksitcompletely.'To	eball.'See?Ididn'tstopit,andIdidn'tma	ertogothroughthestraight(Speed).Itapt

	nthatnothingmoveswithoutforce. **IDO—Te**	givenitamuchstrongerpushinthesamedirec	slowsomething,Iapplyaforceintheopposi	keitgofasterinastraightline.Ichangedi	hesidetoturn(Direction).Ipullback/blo

	acherModeling(7minutes): Teacherdemonstration, itmovesmuchfaster.' Teacherexplai	tedirection. Ifthefforceisstrongenough,	tsdirectionbyapplyingasside-push.' **WED**	cktostop(Stop).' Think-aloud:' IfIpushtt

	tratesmovingastationarytoycarondadesk.	nsthat'morefforce'equalls'moresped'whe	itstops.'**WEDO—GuidedPractice(7minutes)**:Ingroupsof	**O—GuidedPractice(7minutes)**:Ingroupsof	ohardhere,Imightmisstheturn!'**WEDO—G**

	'Watch as I apply a push. My hand moves toward	napplied in the direction of motion. **WEDO—**	**s):** Students work in pairs with a plastic bot	three, students sit in a triangle. Student A	**uided Practice (7 minutes):** Students worki

	the car. Now, look as I apply a pull. My hand mo	**Guided Practice (7 minutes): I** n pairs, stud	tle. One roll sit, and the other m ust use one f	roll sto Student B, but St udent B m ust 't ap' t	nsmall groups to build their own mini-cours

	vesawayhilebringingthecarwithit.Notice
	entsrollamarbletoeachotherFirst,they
	ingertoo'slow'itdownbeforeitreachesthe
	heballsoitgoestoStudentCinsteadofstop
	e.Teacherwalksaroundasking:'Showmehow

	the car was still, but the force started edit	roll it slowly. Then, the teacher says 'Incr	edge of the desk. Teacher asks: 'Did you push	ping it. Teacher asks: 'Where did you apply t	you will make it turn here' and 'How will you

smotion. 'Commonmisconception: Objectsn

easespeed! 'andstudentsapplymoreforce.

thebottleinthesamedirectioniwasrolli

heforcetomakeitturn? 'Expectedresponse

topitbeforeitshewall? '

YOUDO—Inde

	edaconstantpushtokeepmovinginspace;c
	Teacherasks:'Howdidyouchangethespeed?
	ng?'Expectedresponse:'No,wepushedagai
	:'Onthesideofthebball.'**YOUDO—Independ**
	pendentPractice(6minutes): Individualt

	larifythatonEarth,thingsstopduetotothe	'Expectedresponse:'Bypushingitharder	nstitit.'**YOUDO—Independent Practice(6mi**	**entPractice(6minutes):**Shorttask:Drawa	ask:'TheForcedDiary'.Studentswriteasho

	rforceslikefriction. **WEDO—GuidedPract**	.' **YOUDO—Independent Practice (6minutes**	**nutes):** Individualtask:Studentslist3th	mazeonpaper.Studentsusestrawtoblowas	rtparagraph:'Towintherace,Ifirst_____

	ice(7minutes): Teacherandstudentssseth
	): Shorttask: Studentscompletea 'Force/S
	ingsthathelpthemstopmovingwhentheyare
	mallpaperballthroughthemaze, noticingeve
	_ _ _(pushed)thebball. Togetpastthechair,

	eirnotebooks. Togetherr, theypushtheenote	peed'worksheetwhereretheymustcirclethep	runningg(e.g., shoesgrippingtheground, a	rytimethey haveto'push'fromthesidetotu	Ipushedit fromthe_____(side). Tofini

	bookawayandpullitback. Teacherasks: 'Wh	ersonapplying 'MoreForce' toachieve 'Mor	wall, someonecatchingthem). **Differenti**	rnacorner. **Differentiated Activity 1 (4m**	sh, Ihadto_____('stop)itatthehelline.'	

	athappensifwedon'tapplyforce?'Expecte	eSpeed'(e.g.,apersonrunningvs.walking	**atedActivity1(4minutes):**ScientificGro	**inutes):**SportsGroup:List5sportswherep	**Differentiatedactivity1(4minutes):**Eng

	dresponse: 'Itstaysstill.' Teacherguide
	). **DifferentiatedActivity1(4minutes):**
	up: Testdifferentsurfaces(sandpapervs.
	layerschangethedirectionofaball(e.g.,
	ineeringGroup: Buildaramphatincludesa

	student identify the direction of the f	LogicGroup: 'SpeedScientists'. Predict w	wax paper) to see which one slows a marble down	Tennis, Volleyball, Basketball). **Differ**	'turn' at the bottom using cardboard. **Diff**

	orcerelativetotheobject'smovement. **YO**	hichoftheireitems(feather,ball,book)wi	nfaster. **Differentiated Activity 2 (4 min**	**entiated Activity 2 (4 minutes):** Analysis G	**erentiated Activity 2 (4 minutes):** Movemen

	UDO—Independent Practice (6 minutes): Ind	llgo the fast est with the sam e am ou nt of pus	**ute s):** Lit er acy Gr ou p: Wr it ea' Th an k Yo u' n	rou p: Lo ok at pic tu re so fa pin ba ll m ac hin e.	tGr ou p: Cr ea te a' Hu m an Ob st ac le Co ur se' wh

	ividualtask:Studentsdrawoneexampleofa	h.**DifferentiatedActivity2(4minutes):**	otetoFriction,explainingshowitthelpsusn	Identifywhatpartschangethedirectionof	ereonestudentdirectsanotherusing'Push

	pushandoneexampleofapullthey doathome(	CreativeGroup:Drawacomicstripofasuper	otslideforever. **DifferentiatedActivit**	theball. **DifferentiatedActivity3(3min**	/Pull'verbalcommands. **DifferentiatedA**

	e.g., pushing a door, pulling a zipper). The	hero using 'superforce' to make a car go fast	**y 3 (3 minutes):** Art Group: Design a 'Safety S	**utes):** Peer-Teaching: One student explain	**ctivity 3 (3 minutes):** Observation Group: W

	ymustlabelthearrowshowingthedirection	er. **DifferentiatedActivity3(3minutes**	top'postershowingshowcarbrakeswork usin	stoanotherwhyacarneedsasteeringwheel(	atchal-minutevideoofasoccergameandtal

	of the force. **Differentiated Activity 1 (4**	**):** Tactile Group: Using a toy car, practice'	gap shfor ce. **Generalization (2 minutes**	which applies for cet o the wheels to change d	l y h o w m a n y t i m e s t h e b a l l c h a n g e d s p e e d v s . d

	minutes): Visual Group: Create a T-chart 'Push' vs 'Pull'	soft push hesitation.	**):** Synthesize: Pushing against the direct	irection). **Generalization (2 minutes):**	irection. **Generalization (2 minutes):** Sy

	ushvs. Pull' usingmagazinecutoutsorprov	urfaceslikecarpetvstiles. **Generalizat**	onofmotionslowsdownorstopsanobject.	Synthesize: Aforceappliedfromthesideof	nthesize: Weuseddifferententypesandamount

	ided stickers of people playing sports. **Di**	**ion (2 minutes):** Synthesize: Tom ake and object	**Assessment (2 minutes):** Direct ions for the	among object changes its direct ion. **Ass**	soft or cet o control how things move ever yda

	fferentiated Activity 2 (4 minutes): Kines	ctgo fastter, apply more force in the same dir	separately listed five MCQs regarding slow	**essment (2 minutes):** Directions for the sep	y. **Assessment (2 minutes):** Directions for

	theticGroup:'ForceStatues'.Inpairs,on
	ectionitisalreadymoving.**Assessment(2**
	ingandstoppingobjects.
	aratelylistedfivemCQsregardingchangin
	thefinalfivemCQscoveringtheintegrated

	estudentactsasthe'objectt'(standingsti	**minutes):** Directionsforthesepartatelyli		gdirection.	applicationoffforce.

	ll) and the other simulates a push or pull (no	sted five MCQs regarding increasing speed.			

	actual touching) while the 'object' moves a				

	cordingly. **Differentiated Activity 3 (3**				

	minutes): Verbal Group: Write two sentence				

susingtheliteracyprompt:'Iusedapushto

_____andapullto_____:'

Generalizati

	on (2 minutes): Synthesize: Forces are pushes				

esandpulls.Astationaryobjectrequiresf

	orcetobeginmoving. **Assessment(2minute**				

	s): Directionsforthesepartelylistedfi				

	veMCQsregardingstartingmotionviapusha				

LearningResources: Listdownthelear	ndpull.	DepEdGrade4ScienceLearner'sMa	Toycars,rubberballs,marbles,a	Classroomobjects:Books,eraser	Worksheets:'PushandPullinActi	Videoclip:'HowSoccerPlayersCo

ningresourcesthatwillhelpyoureachyourobjectives.Ens

terial,Unit3:ForceandMotion.

ndrulers.

s,plasticbottles.

on'and'TheSpeedChallenge'.

ntrolthe Ball' (DepEdPortalorsimilar).

Opportunit	Literacy In	Collaborat	Critical Th	Self-Corre	Numeracy: M
urethatthey areavailableandinclusive.					

iesforintegration: Writedownanypossibilitiest	tegrationStudentsuseactionverbs(push	ion:Peer-ledguideddpracticedduringthema	inking:Predictingthoutcomeofvaryingf	ction:Using'Think-Aloudds'toidentifywh	easuringthedistanceballtravelswhenpu

omeaningfullyanchorlearningareas,specialtopic,ortec

,pull,accelerate,deflect)indescriptiv

rblenavigationtasks.

orcemagnitudesondifferentobjects.

yanobjectdidn'tmoveasintendedduringac

shedwithdifferentlevelsofforce(Option

hnology. WriteN/Aifnone.	esentences.			tivities.	alextension).
Assessment.	Assessments reveal what learners have gained and what they still need help with. These are helpful in providing you with information to guide your future instruction.				
Fo	1.	1.	1.	1.	1.

rmativeAssessment: Createatask,activity,orque
Whichactionisneedtomoveastationaryc
Tomakeamovingbicyclegofaster,youshoul
Whichforcehelpsamovingcarslowdownwhen
Howcanyouchangethedirectionofarolling
Asoccerplayerkicksaballtoateammate.Th

stionstoevaluatelearningandprovidefeedback.(Strictl

hairawayfromyou?A.PullB.PushC.LiftD.D

d:A.Applythebrakes B.Stoppedalling C.Ped

itrubsagainstthekeroad?A.Magneticforce

marble?A.Bypushingithardenfrombehind

isisanexampleofchangingthebeball's:A.Ma

y5MCQspersession).

rop2.Whatisforceinscience?A.Atypeofforcethathardeninthesamedirection D.Turnthehalt

B.FrictionC.SpeedD.Pull2.Tostopball

B.Bytappingitfromthesides C.Bydoingnothing

ssB.SpeedanddirectionC.TemperatureD.V

	nergyonlyB.ApushorapullC.Howheavyanob
	ndlebarssharply2.Whathappenstothespe
	rollingtowardyou,youmuststapplyaforce:
	ingD.Bybloweingoonitfrombehind2.Inagam
	olume2.Tonavigateatoycarthroughacurv

	jectisD.Thespeedofacar3.Whichofthese	edofaballifyougiveitastrongerpush?A.I	A.Inthesamedirectiond.FromthesideC.In	eoftenmis,theracketissuedtochangethe_	edtrack,youmustuse_____.A.Onlypul

	shows a pull? A. Kicking a ball B. Closing a dr	ts slows down B. It stops C. It increases D. Its	the opposite direction D. Upwards 3. If you	____ of the ball. A. Weight B. Size C. Dire	ls B. Only push es C. Both speed and direction

	awerbyhittingitC.Openingarefrigeratorcatchaflyingfrisbee,youare_____itstaysthesame3.Ifyouwantatoycartowinarcti onD.Materiall3.IforceisappliedfrchangesD.Frictiononly3.Whichactionco

	door.Throwingastone4.Ifatoycarisnot	ace,youshouldapply_____force.ALe	motion.A.StartingB.IncreasingC.Stoppi	omtheleftsideofanobjectmovingforward,	mbineschangingspeedanddirection?A.Sto

	moving, whatisrequiredtostartitsmotio	ssB. ZeroC. MoredD. Oppositee 4. Speeddescr	ngD. Accelerating 4. Whydoesaballeventu	itwilltturn: A. RightB. LeftC. BackwardD. U	pingataredlightB. Pushingaswinghigher

	n?A.Nothing	ibes:A.How	allystopro	pward4.Wh	C.Swervingtoavoidapuddlewhilerunningf
	B.Gravityonly	heavyanobj	llingongra	ichpartofa	
	C.AforcedD.Lig	ectisB.How	ssA.Becaus	caruseds	
		fastano	egrass	edtocha	
				nge	

	ht 5.Whichofthefollowingisanexampleof	bjectmovesC.Thecolorofanobjectd.Theshh	pushesitfasterB.Becauseoffrictionpush	itsdirectionA.Theengineebrakesc.	asterD.Sittingonachair 4.Ifyouwantano

	apush?A. Typing on a keyboard B. Picking up a	apeofan object 5. When a runner wants to acc	ingagainst it C. Because it runs out of aid D.	The steering wheel D. The tire responds only 5. To'	bject to go faster and the entur nleft, you sho

	pencilC.Pullingawagond.Flyingakite An
	elevate,theypush_____againstthegro
	Becauseitwantstorest5.Applyingagentl
	eflect'anobjectmeanstto:A.Stopitcomple
	uld:A.Pushhardfrombehind,thenpushfrom

	swerKey: 1-B, 2-B, 3-C, 4-C, 5-A	und. A. SofterB. HarderC. GentlyD. Notata	epushagainstamovingswingwill_____.	telyB. MakeitgoofasterC. Changeitspathor	therightsideB. Pullitbackward, thenpush

		ll Answer Key: 1-C, 2-C, 3-C, 4-B, 5-B	A. Make it go higher B. Change it's color C. Slo	direction D. Pick it up Answer Key: 1-B, 2-C	from the left side C. Push it softly, then sto

			with down. Make it go faster Answer Key: 1-B	, 3-A, 4-C, 5-C	pit D. Push from the left side first 5. Force

			,2-C,3-C,4-B,5-C		sareusedindailylifeto:A.Keepthingssti

llonlyB.Controlthemovementofobjects C.

					Change the smell of things D. Make things hea

						viier Answer Key: 1-B, 2-C, 3-C, 4-A, 5-B
W a	Meaningful learning can					

ysForward.	also happen beyond the classroom - for both the learners and the teacher. Pause and reflect on what happened today.

Extendedlearningopportuni	Observe 'For ceinSports': Wa	Home For ceHunt: Identify fiv	Friction Investigation: Try	Design a Maze: Create a cardboa	Safety Connection: Intervie

ties: Suggest other learning experiences outside the cla
t chas hort cli pof avol leyb allg amea ndli st
e obj ects ath ome thatr equi rea' pull' tofun
s ldi ngac oin onaw oode ntab leve rsus sabath
ar dma zeand chal leng eaf amil ymem bert oma v
wpar enta bout why itis imp ortan tto' slow d

ssroom/classhourshatlearnersmaywanttoaccessstoreinf

threetimesaplayerchangedthebball'sdire

ction(e.g.,curtains,drawers).

towelandexplainwhyoneisslower.

eamarblethroughitusingonlyastraw(airp

own'acarbeforemakinga'turn'atacorner.

orcewhatthheyhavelearned...	ction.			ush).	
Reflections: Thinkab	(Tobefilledoutafterth	(Tobefilledoutafterth	(Tobefilledoutafterth	(Tobefilledoutafterth	(Tobefilledoutafterth

outwhatyouneedtochangefornextsessionbasedonwhath

elesson)

Reflectionprompt: Didthelearnerseasil

elesson)

Reflectionprompt: Didtheguidedpractic

elesson)

Reflectionprompt: Whichpartofthecolla

elesson)

Reflectionprompt: Howwelldidtheformat

elesson)

Reflectionprompt: Whatpercentageofthe

appenedtoday.	ygraspthecoreconceptintroducedtoday?	effectivelytranslateintoindependentsuccess?	borativetaskchallengedthestudentsthemost?	iveassessmentreflectthelearningobjectives?	classreachedproficiencybytheendoftheweek?

Prepared by: **Teaching Hub** Teacher	**Checked by:** Principal / Head