

WEST DEPTFORD SCHOOL DISTRICT

Content Area: Science			
Course Title: Grade 6 Science		Grade Level: 6	
		Weeks Spent	
	Quarter 1: Solar System and Beyond/Begin Ecology	9 weeks	
	<ul style="list-style-type: none"> • What have we learned from missions to space? • How do we predict changes in the moon's appearance? • Why don't we see solar and lunar eclipses more often? • What does Earth's orbit around the sun have to do with the seasons? • What types of objects are found in space? • What features make each planet in our solar system unique? • How does gravity affect the motions of objects in space? • What effects can an introduced species have on an ecosystem? • Do introduced species' populations change based on their new environment? • What is an owl pellet's role in a food web? • How do matter and energy move in an ecosystem? • How does the availability of food affect an ecosystem? • What is the role of decomposers in an ecosystem? 		
	Quarter 2: Finish Ecology/Fields and Interactions	9 weeks	
	<ul style="list-style-type: none"> • How do introduced and invasive species negatively affect an ecosystem? • What strategies can be taken to help preserve ecosystems and populations? • How do engineers use a design process to solve problems? • How can energy be transferred? • What determines the amount of gravitational force between objects? • How can we visualize a magnetic field? • What are the effects of static electricity? • What determines the amount and direction of electrostatic force? • What is the relationship between electric and magnetic fields? 		
	Quarter 3: Force and Motion	9 weeks	

	<ul style="list-style-type: none"> How can you measure and graph the speed of a moving object? How does the mass of an object affect its kinetic energy? What causes an object to change direction? What causes an object to change speed? What is the mathematical relationship between force, mass, and acceleration? How are Newton's laws applicable in everyday life? 			
	Quarter 4: Weather		9 weeks	
	<ul style="list-style-type: none"> What is climate change, and how does it affect us? How are daily weather data different from seasonal weather data? How have severe weather events shaped the earth? How can climate patterns help us predict future changes? How do different surfaces of the earth gain and lose thermal energy? How does water behave when it mixes? How does air behave when it mixes? 			
<i>Date Created: August 2022</i> <i>Revised: August 2023</i>		<i>Board Approved on: August 2022</i> <i>Revised Board Approved: August 2023</i>		

WEST DEPTFORD SCHOOL DISTRICT
Sixth Grade Science Pacing Guide
Unit: Solar System and Beyond

Activity Number	Title		Number of Days
1	Exploring Space		2
2	The Predictable Moon		3
3	Explaining the Moon's Phases		3
4	The Moon's Orbit		2
4	Moon Phase Simulations		1
5	Changing Sunlight		2

6	A Year Viewed From Space		2
7	Earth's Tilt		4
8	Earth on the Move		2
9	Observing Objects in Space		3
	Unit 1 Quiz		1
10	Drawing the Solar System		1
11	How Big Are the Planets?		2
12	Identifying Planets		2
13	Gravitational Force		2
14	The Effects of Gravity		1
15	Modeling Gravity		1
16	Choosing a Mission		2
	Unit 1 Test		1

WEST DEPTFORD SCHOOL DISTRICT
Sixth Grade Science Pacing Guide
Unit: Ecology

Activity Number	Title		Number of Days
1	The Miracle Fish?		2
2	Introduced Species		7
3	Data Transect		2
4	Taking a Look Outside		3
5	A Suitable Habitat		2

6	Ups and Downs		2
7	Coughing Up Clues		5
8	Eating for Matter and Energy		4
9	Population Growths		1
10	Interactions in Ecosystems		2
	Unit 2 Quiz		1
11	Cycling of Matter		2
12	Modeling the Introduction of New Species		2
13	Abiotic Impacts on the Ecosystem		2
14	Effects of an Introduced Species		2
15	Too Many Mussels		1
16	Presenting the Facts		2
	Unit 2 Test		1

WEST DEPTFORD SCHOOL DISTRICT
Sixth Grade Science Pacing Guide
Unit: Fields and Interactions

Activity Number	Title		Number of Days
1	Save the Astronaut!		2
2	The Apollo Missions		1
3	Gravitational Transporter		3
4	Gravitational Force		4
5	Mapping Magnetic Fields		1
6	Magnetic Transporter		2

7	Gravitational and Magnetic Fields		4
	Unit 3 Quiz		1
9	Static Electricity		3
10	Electromagnetic Force		2
11	Visualizing an Electric Field		1
12	Electric Field Transporter		1
13	Electric and Magnetic Fields		2
14	Gyrosphere Rescue		2
15	Electric and Electromagnetic Fields		1
16	Evaluating Transporter Designs		1
	Unit 3 Test		1

WEST DEPTFORD SCHOOL DISTRICT
Sixth Grade Science Pacing Guide
Unit: Force and Motion

Activity Number	Title		Number of Days
1	Improving Car and Driver Safety		2
2	Measuring and Graphing Speed		2
3	Speed and Kinetic Energy		2
4	Mass and Kinetic Energy		2
5	Quantifying Kinetic Energy		2
6	Changing Directions		4
7	Changing Speed		2
8	Force, Mass, and Acceleration		2
	Unit 4 Quiz		1
9	Newton's Laws of Motion		3
10	Interacting Objects		2

11	Newton's Third Law		2
12	Collisions and Changes in Motion		2
13	Braking Distance		2
14	Coming to a Stop		2
15	Designing a Car and Driver Safety Systems		1
	Unit 4 Test		1

WEST DEPTFORD SCHOOL DISTRICT
Sixth Grade Science Pacing Guide
Unit: Weather and Climate

Activity Number	Title		Number of Days
1	Climate Change		2
2	Investigating Local Weather		4
3	Local History of Severe Weather		6
4	Climate Types and Distribution Patterns		4
5	Earth's Surface		2
6	Heating Earth's Surfaces		1
7	Ocean Temperatures		1
8	Investigating Water		2
	Unit 5 Quiz		1
9	Oceans and Climate		2
10	The Causes of Climate		4
11	Worldwide Wind		1
12	Measuring Wind and Speed Direction		1
13	Forecasting Weather		4
14	Atmosphere and Climate		2
15	History of Earth's Atmosphere		1

16	Global Warming		2
17	People, Weather, and Climate		2
	Unit 5 Test		

WEST DEPTFORD SCHOOL DISTRICT
Sixth Grade Science Lesson Plan Format
{45 Minutes of Instruction}

ENGAGE

10 minutes

- Do Now - access prior learning / simulate interest/ generate question / visit website

EXPLORE

25 minutes

- Objective and guiding question as a class
- Teacher notes/directions/and expectations
- Individual/partner/group activities and labs

EVALUATE

10 minutes

- Formative monitoring
- Summative assessment
- Exit ticket