

WEST DEPTFORD SCHOOL DISTRICT

Content Area: Science			
Course Title: Human Impact			Grade Level: 8
			Weeks Spent
Quarter 1:			9 weeks
<ul style="list-style-type: none"> ● Activity 1 - Where Should We Build? ● Activity 2 - Does it Dissolve? ● Activity 3 - Water Quality ● Activity 4 - Living Indicators ● Activity 5 - Nutrients as Contaminants ● Activity 6 - Gulf of Mexico Dead Zone ● Activity 7 - Cutting Canyons and Building Deltas ● Activity 8 - Traveling with the Water Cycle ● Activity 9 - Human Impacts on Earth's Water ● Activity 10 - Making Topographic Maps ● Activity 11 - Boomtown's Topography ● Activity 12 - Modeling Cliff Erosion ● Activity 13 - Weathering, Erosion, and Deposition ● Activity 14 - Building on the Mississippi ● Activity 15 - Building in Boomtown ● Activity 16 - Building Site Plan 			
Quarter 2: Evolution			9 weeks
<ul style="list-style-type: none"> ● Activity 1 - The Full Course ● Activity 2 - Hiding in the Background ● Activity 3 - A Meeting of Minds ● Activity 4 - Battling Beaks ● Activity 5 - Mutations: Good or Bad? ● Activity 6 - Mutations and Evolution ● Activity 7- Origins of Species ● Activity 8 - History and Diversity of Life ● Activity 9 - Fossil Evidence ● Activity 10 - Fossilized Footprints ● Activity 11 - Family Histories ● Activity 12 - A Whale of a Tale ● Activity 13 - Embryology ● Activity 14 - The Sixth Extinction? 			

	<ul style="list-style-type: none"> ● Activity 15 - Bateria and Bugs: Evolution of Resistance ● Activity 16 - Manipulating Genes ● Activity 17 - Evolution and US 		
	Quarter 3: Energy		9 weeks
	<ul style="list-style-type: none"> ● Activity 1 - Home Energy Use ● Activity 2 - Drive a Nail ● Activity 3 - Roller Coaster Energy ● Activity 4 - Shake the Shot ● Activity 5 - Conservation of Energy ● Activity 6 - Follow the Energy ● Activity 7 - Mixing Hot and Cold Water ● Activity 8 - Thermal Energy Storage ● Activity 9 - Energy Across the Sciences ● Activity 10 - Energy Transfer Challenge ● Activity 11 - Energy in Light ● Activity 12 - Conduction, Convection and Radiation ● Activity 13 - Maximizing Solar Energy Transfer ● Activity 14 - Hot Bulbs ● Activity 15 - Improving Home Energy Efficiency 		
	Quarter 4: Waves		9 weeks
	<ul style="list-style-type: none"> ● Activity 1 - It's a Noisy World ● Activity 2 - Making Sound Waves ● Activity 3 - The Nature of Sound ● Activity 4 - Noise-Induced Hearing Loss ● Activity 5 - Telephone Model ● Activity 6 - Analog and Digital Technology ● Activity 7 - Another Kind of Wave ● Activity 8 - Wave Reflection ● Activity 9 - Refraction of Light ● Activity 10 - Comparing Colors ● Activity 11 - Selective Transmission ● Activity 12 - The Electromagnetic Spectrum ● Activity 13 - Where Does the Light Go? ● Activity 14 - Blocking out Ultraviolet ● Activity 15 - Personal Protection Plan 		
<i>Date Created: August 2022</i> <i>Revised: August 2022</i>		<i>Board Approved on: August 2022</i> <i>Revised Board Approved: August 2022</i>	

WEST DEPTFORD SCHOOL DISTRICT
Eighth Grade Science Pacing Guide 2022 – 2023
Unit: Human Impacts

Activity Number	Title	DATES	Number of Days
1	Where Should We Build?	9/12	1
2	Does it Dissolve?	9/13-9/14	2
3	Water Quality	9/15-9/16	2
	Flint Water Crisis Documentary	9/19-9/20	2
4	Living Indicators	9/21-9/22	2
5	Nutrients as Contaminants	9/23 & 9/26	2
	Activities 1-5 Quiz	9/27	1
6	Gulf of Mexico Dead Zone	9/28	1
7	Cutting Canyons and Building Deltas	9/29-9/30	2
8	Traveling with the Water Cycle	10/3-10/4	2
	Water Cycle Project	10/5, 10/6, & 10/11	3
9	Human Impact on Earth's Water	10/12	1
10	Making Topographic Maps	10/13-10/14	2
	Activities 6 -10 Quiz	10/17	1
11	Boomtown's Topography	10/18-10/19	2
12	Modeling Cliff Erosion	10/20-10/21	2
13	Weathering, Erosion, and Deposition	10/24	1
	<i>What If This Was Your Water?</i> Article	10/25	1
14	Building on the Mississippi	10/26	1
15	Building in Boomtown	10/27-10/28	2
16	Building Site Plan	10/31-11/1	2

	Unit Review	11/2-11/3	2
	Unit Test	11/4	1

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Eighth Grade Science Pacing Guide 2022 – 2023
Unit: Evolution

Activity Number	Title	Dates	Number of Days
1	The Full Course	11/14-11/15	2
2	Hiding in the Background	11/16-11/17	2
3	A Meeting of Minds	11/18	1
4	Battling Beaks	11/21-11/22	2
5	Mutations: Good or Bad?	11/28-11/29	2
	<i>Create Your Own Beast Activity</i>	11/30	1
6	Mutations and Evolution	12/1-12/2	2
	<i>Animal Adaptations Activity</i>	12/5	1
7	Origins of Species	12/6-12/7	2
8	History and Diversity of Life	12/8-12/9	2
	Activities 1-8 Quiz	12/12	1
9	Fossil Evidence	12/13-12/14	2
10	Fossilized Footprints	12/15	1
11	Family Histories	12/16 & 12/19	2
12	A Whale of a Tale	12/20-12/21	2
13	Embryology	12/22-12/23	2
14	The Sixth Extinction?	1/3-1/4	2

	Evolution Project	1/5,1/6, & 1/9	3
15	Bacteria and Bugs: Evolution of Resistance	1/10	1
16	Manipulating Genes	1/11-1/12	2
	Activities 9-16 Quiz Review	1/17	1
	Activities 9-16 Quiz	1/18	1
17	Evolution and US	1/19-1/20	2
	Unit Review	1/23-1/24	2
	Unit Test	1/25	1

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Unit: Energy

Activity Number	Title	Dates	Number of Days
1	Home Energy Use	1/30-1/31	2
2	Drive a Nail	2/1-2/2	2
3	Roller Coaster Energy	2/3	1
	<i>Marble Roller Coaster Activity</i>	2/6	1
4	Shake the Shot	2/7-2/8	2
5	Conservation of Energy	2/9-2/10	2
6	Follow the Energy	2/13-2/14	2
7	Mixing Hot and Cold Water	2/15-2/16	2

	Activities 1-7 Quiz	2/21	1
8	Thermal Energy Storage	2/22-2/23	2
9	Energy Across the Sciences	2/24	1
	<i>Paris to Pittsburgh</i> Documentary	2/27	1
10	Energy Transfer Challenge	2/28-3/1	2
11	Energy in Light	3/2-3/3	2
12	Conduction, Convection, and Radiation	3/6	1
13	Maximizing Solar Energy Transfer	3/7-3/8	2
	Heat Loss Project	3/9,3/10, & 3/13	3
14	Hot Bulbs	3/14-3/15	2
	Activities 8-14 Quiz	3/16	1
15	Improving Home Energy Efficiency	3/20-3/21	2
	Unit Review	3/22-3/23	2
	Unit Test	3/24	1

WEST DEPTFORD SCHOOL DISTRICT
Eighth Grade Science Pacing Guide 2022 – 2023
Unit: Waves

Activity Number	Title	Dates	Number of Days
1	It's a Noisy World	3/27	1
2	Making Sound Waves	3/28-3/29	2
3	The Nature of Sound	3/30	1

	Yanny vs. Laurel Debate	3/31	1
4	Noise-Induced Hearing Loss	4/3	1
	Activities 1-4 Quiz	4/4	1
5	Telephone Model	4/5	1
6	Analog and Digital Technology	4/17	1
	Wired to Wireless Project	4/18-4/20	3
7	Another Kind of Wave	4/21 & 4/24	2
8	Wave Reflection	4/25-4/26	2
9	Refraction of Light	4/27-4/28	2
10	Comparing Colors	5/1	1
11	Selective Transmission	5/2-5/3	2
	Activities 5-11 Quiz	5/4	1
12	The Electromagnetic Spectrum	5/5	1
13	Where Does the Light Go?	5/8-5/9	2
14	Blocking out Ultraviolet	5/10-5/11	2
15	Personal Protection Plan	5/12 & 5/15	2
	Waves Unit Project	5/16-5/19	4
	Unit Review	5/22-5/23	2
	Unit Test	5/24	1

WEST DEPTFORD SCHOOL DISTRICT
Eighth Grade Science Pacing Guide 2022 – 2023
Unit: End of Year Final Review (Survivor Science)

Day	Title	Dates	Number of Days
1	Introduction to Survivor Science	5/25	1
2	Super Surfers Challenge	5/26	1
3	Tribal Council & Complete Reward Challenge	5/30	1
4	Complete Immunity Challenge	5/31	1
5	Tribal Council & Super Scientists Challenge	6/1	1
6	E=MC ² Challenge	6/2	1
7	Tribal Council & Word Whomp Challenge	6/5	1
8	Survival of the Fittest Challenge	6/6	1
9	Tribal Council & Inspector Gadget Challenge	6/7	1
10	Complete final challenge and announce winning Tribe	6/8	1
11	End of Year Final	6/9	1

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

ENGAGE

10 minutes

- Opening activity - access prior learning / simulate interest/ generate question

EXPLORE

25 minutes

- Introduce lesson objective and expectations to students
- Teacher demonstration/modeling
- Student practice

EVALUATE

10 minutes

- Formative monitoring
- Summative assessment