Nitty Gritty Science Physical Science Curriculum
Suggested Pacing Guide
NGSS and TEKS Alignment

Digital options are included for interactive notebooks, task cards, study guides, and chapter tests.

Nature of Science Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – The Ice Issue	x					PS3–4	6.3, 7.3, 8.3
	• Section 1 Notes – The Method of Science		x					
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Standards of Measurement		x					6.2, 7.2, 8.2
	• PowerPoint/INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Colorful Observations			x				6.4, 7.4, 8.4
4	• Section 3 Notes – Graphing		x					6.2, 7.2, 8.2
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Science Stations				x			6.2, 6.3, 6.4, 7.2, 7.3, 7.4, 8.2, 8.3, 8.4
6	• Science Stations				x			
7	• Final Draft and testing for creation station				x	x		
8	• Task Card Review and/or				x			
	• Study Guide				x			
9	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Intro to Physical Science Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo –	x						
	• Section 1 Notes – The Scope of Physical Science		x					
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Science Lab Safety		x					
	• PowerPoint/INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab –			x				
4	• Section 3 Notes – Methods of Science and Technology		x					
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Science Stations				x			
6	• Science Stations				x			
7	• Final Draft and testing for creation station				x	x		
8	• Task Card Review and/or				x			
	• Study Guide				x			
9	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Motion & Forces Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Crash Test Teddy	x					PS2–1, PS2–2, PS2–4	6.8, 7.7, 8.6
	• Section 1 Notes – Describing Motion		x				PS2–2	6.3, 6.8, 7.3, 8.3, 8.6
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Acceleration		x				PS2–2	8.6
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Newton's Racers			x			PS2–1, PS2–2	7.7
4	• Section 3 Notes – Motion and Forces		x				PS2–2	6.8, 8.6
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Newton's Laws of Motion		x				PS2–1, PS2–2	6.3, 7.3, 8.3, 8.6
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Gravity						PS2–4	7.7
	• PowerPoint/INB Activity							
7	• Mini–quiz					x		
	• Science Stations				x		PS2–4, PS3–1, PS3–2	6.8, 7.7, 8.6
8	• Science Stations				x			
9	• Final Draft and testing for creation station				x	x		
10	• Task Card Review and/or				x			
	• Study Guide				x			
11	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Energy, Work, and Simple Machines Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Mystery Machines	x					PS2–4	6.3, 6.8, 7.3, 8.3
	• Section 1 Notes – Nature of Energy		x				PS3–1, PS3–2	6.8
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Conservation of Energy		x				PS3–5	6.8, 6.9
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Potential Energy of Food			x			PS3–1, PS3–5	6.9, 7.7
4	• Section 3 Notes – Work		x				PS–3–2	7.7
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Using Machines		x				PS3–2	6.8
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Simple Machines						PS3–2	6.8
	• PowerPoint/INB Activity							
7	• Mini–quiz					x		
	• Science Stations				x		PS3–1, PS3–2, PS3–5	6.8, 6.9, 7.7
8	• Science Stations				x			
9	• Final Draft and testing for creation station				x	x		
10	• Task Card Review and/or				x			
	• Study Guide				x			
11	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Electricity and Magnetism Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Feeling Jumpy	x					PS2–3, PS2–5	6.6
	• Section 1 Notes – Electricity		x				PS2–3	6.9
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Electric Current		x				PS2–3	6.7, 6.9, 8.3
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Constructing Circuits			x				6.6, 6.9
4	• Section 3 Notes – Electrical Circuits		x				PS2–5	6.9
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Magnetism		x				PS2–3	6.6
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Magnetism and Electricity						PS2–5	6.6, 6.9
	• PowerPoint/INB Activity							
7	• Mini–quiz					x		
	• Science Stations				x		PS2–3, PS2–5	6.6, 6.7, 6.9
8	• Science Stations				x			
9	• Final Draft and testing for creation station				x	x		
10	• Task Card Review and/or				x			
	• Study Guide				x			
11	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Waves and Electromagnetic Spectrum Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Waves and Energy	x					PS4–1, PS4–2	8.8
	• Section 1 Notes – Waves		x				PS4–1	8.8
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Features of Waves		x				PS4–1	8.8
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Build a Spectroscope			x			PS4–2	6.3, 7.3, 8.3, 8.8
4	• Section 3 Notes – Behavior of Waves		x				PS4–2	8.8
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Electromagnetic Spectrum		x				PS4–2	8.8
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Communicating with Radio Waves						PS4–3	8.8
	• PowerPoint/INB Activity							
7	• Mini–quiz					x		
	• Science Stations				x		PS4–1, PS4–2	6.3, 7.3, 8.3, 8.8
8	• Science Stations				x			
9	• Final Draft and testing for creation station				x	x		
10	• Task Card Review and/or				x			
	• Study Guide				x			
11	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Sound, Light, Mirrors, & Lenses Spectrum Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Bird in a Cage	x					PS4–1, PS4–2	8.8
	• Section 1 Notes – Sound		x				PS4–2	8.8
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Music and Uses of Sound		x				PS4–2	8.8
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Using Sound and Light			x				8.8
4	• Section 3 Notes – Reflection and Refraction of Light		x				PS4–2	8.8
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Mirrors		x				PS4–2	8.8
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Lenses and Optical Instruments						PS4–2	8.8
	• PowerPoint/INB Activity							
7	• Mini–quiz					x		
	• Science Stations				x		PS4–1, PS4–2, PS4–3	6.3, 7.3, 8.3, 8.8
8	• Science Stations				x			
9	• Final Draft and testing for creation station				x	x		
10	• Task Card Review and/or				x			
	• Study Guide				x			
11	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Matter Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Matter Misconceptions	x					PS1–1, PS1–4	6.5, 7.8
	• Section 1 Notes – Composition of Matter		x				PS1–1	6.5
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Types of Mixtures		x				PS 1–2, PS 1–3	6.5
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Monster Muck			x				6.3, 6.5, 7.3, 8.3
4	• Section 3 Notes – Describing Matter		x				PS 1–2, PS 1–3	6.5, 8.5
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – States of Matter		x				PS1–1	6.6
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Changes in States of Matter						PS 1–2, PS 1–4	7.6
	• PowerPoint/INB Activity							
7	• Mini–quiz							
	• Section 6 – Fluids: Behaviors of Liquids and Gases						PS1–1, PS 1–4	6.3, 6.5, 7.3, 8.3
	• PowerPoint/INB Activity							
8	• Mini–quiz					x		
	• Science Stations				x		PS1–1, PS1–4	6.5, 7.6
9	• Science Stations				x			
10	• Final Draft and testing for creation station				x	x		
11	• Task Card Review and/or				x			
	• Study Guide				x			
12	• Chapter Test					x		
	• Have students complete							

Atoms & the Periodic Table Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Scientific Speculation	x						7.6
	• Section 1 Notes – Atomic Structure		x				PS1–1	6.3, 7.3, 8.3, 8.5
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Masses of Atoms		x				PS1–1	8.5
	• PowerPoint/INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Crunchinumium			x				6.3, 6.5, 7.3, 8.3, 8.5
4	• Section 3 Notes – The Periodic Table		x				PS1–3	6.3, 6.5, 7.3, 8.3, 8.5
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Metals, Nonmetals, & Metalloids		x				PS1–3	6.6, 8.5
	• PowerPoint/INB Activity			x				
6	• Mini–quiz					x		
	• Science Stations				x		PS1–1	6.3, 6.5, 7.3, 8.3, 8.5
7	• Science Stations				x			
8	• Final Draft and testing for creation station				x	x		
9	• Task Card Review and/or				x			
	• Study Guide				x			
10	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Chemical Bonds and Equations Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Synthesis Reaction	x					PS1–1, PS1–2, PS1–5	6.3, 7.3, 8.3
	• Section 1 Notes – Types of Chemical Bonds		x				PS1–1	8.5
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Writing Formulas and Naming Compounds		x				PS1–5	8.5
	• INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Active Metals			x				8.5
4	• Section 3 Notes – Chemical Reactions		x				PS1–2, PS1–5	6.3, 7.3, 8.3
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Section 4 Notes – Balancing Chemical Equations		x				PS1–2, PS1–5	8.5
	• PowerPoint/INB Activity			x				
6	• Mini–quiz							
	• Section 5 – Chemical Rxns: Types, Rate, & Energy						PS1–2, PS1–5	8.5
	• PowerPoint/INB Activity							
7	• Mini–quiz					x		
	• Science Stations				x		PS1–1, PS1–2, PS1–5	6.3, 7.3, 8.3, 8.5
8	• Science Stations				x			
9	• Final Draft and testing for creation station				x	x		
10	• Task Card Review and/or				x			
	• Study Guide				x			
11	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Solutions, Acids, and Bases Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Effects of Solute Particles	x					PS1-2, PS1-4	7.6
	• Section 1 Notes – Solution, Solubility, and Concentration		x				PS1-4	7.6
	• PowerPoint/INB Activity			x				
2	• Mini-quiz					x		
	• Section 2 Notes – Acids, Bases, and Salt		x				PS1-3	7.6
	• PowerPoint/INB Activity			x				
3	• Mini-quiz					x		
	• Guided Inquiry Lab – pH Indicators			x			PS1-2, PS1-4	7.6
4	• Section 3 Notes – Strengths of Acids and Bases		x				PS1-2	7.6
	• PowerPoint/INB Activity			x				
5	• Mini-quiz					x		
	• Science Stations				x		PS1-3, PS1-6	6.3, 7.3, 7.6, 8.3
6	• Science Stations				x			
7	• Final Draft and testing for creation station				x	x		
8	• Task Card Review and/or				x			
	• Study Guide				x			
9	• Chapter Test					x		
	• Have students complete notes for next chapter	x						

Thermal Energy Pacing Guide

The following is a ***suggested pacing guide*** which is based on 50-minute class periods.

Day	Lesson/Activity	Engage	Explain	Explore	Elaborate	Evaluate	NGSS	TEKS
1	• Teacher Demo – Water as Coolant	x					PS1–3, PS1–4, PS1–6, PS3–4	6.9
	• Section 1 Notes – Temperature & Heat		x				PS3–1	6.9
	• PowerPoint/INB Activity			x				
2	• Mini–quiz					x		
	• Section 2 Notes – Transferring Thermal Energy		x				PS3–1	6.9
	• PowerPoint/INB Activity			x				
3	• Mini–quiz					x		
	• Guided Inquiry Lab – Layer of Insulation			x			PS1–2, PS1–4	6.9
4	• Section 3 Notes – Using Heat		x				PS1–4	6.9
	• PowerPoint/INB Activity			x				
5	• Mini–quiz					x		
	• Science Stations				x		PS1–3, PS1–4, PS1–6, PS3–3, PS3–4	6.9
6	• Science Stations				x			
7	• Final Draft and testing for creation station				x	x		
8	• Task Card Review and/or				x			
	• Study Guide				x			
9	• Chapter Test					x		
	• Have students complete notes for next chapter	x						