

Grade 7 Unit 1: Energy and Matter

Pacing Guide using Inspire Science Physical Science Unit 3

1 day = 1 hour period

Module 1 - Lessons 1, 2, 3

Module 2 - Lessons 1, 2, 4

*This unit is paced out to 54 days which is longer than the allotted time period. Teachers will have to make instructional decisions about which Investigations and Labs to complete in order to cut some time out of the pacing guide. This unit should take 1 marking period total.

Day	Lesson	Resources
1	Module 1 Opener Module 1 Lesson 1: Fruit Pops Science Probe Module 1 Lesson 1: Encounter the Phenomenon - Particles in Motion	Interactive Presentation Module Vocabulary List Module Pretest Interactive Presentation Interactive Presentation
2	Module 1 Lesson 1: Explain the Phenomenon - CER Module 1 Lesson 1: Lab - Wait for It Module 1 Lesson 1: Read About - How do Particles Move?	Interactive Presentation Interactive Presentation Collaboration Kit for supplies Reading Essentials Foldables Interactive Presentation

3	<p>Module 1 Lesson 1: Investigation - Ready, Set, Collide</p> <p>Module 1 Lesson 1: Read About - What determines how much energy particles have?</p> <p>Module 1 Lesson 1: 3D Thinking Question</p> <p>Module 1 Lesson 1: Collect Evidence - Part A</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
4	<p>Module 1 Lesson 1: Investigation - On the Rise</p> <p>Module 1 Lesson 1: Read About - What happens to a liquid when kinetic...Energy and Volume</p> <p>Module 1 Lesson 1: 3D Thinking Question</p> <p>Module 1 Lesson 1: Read About - What happens to a liquid when...Energy and Temperature</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
5	<p>Module 1 Lesson 1: Read About - What happens to a liquid when kinetic...Temperature Scales</p> <p>Module 1 Lesson 1: 3D Thinking Question</p> <p>Module 1 Lesson 1: Collect Evidence - Part B</p> <p>Module 1 Lesson 1: Investigation - It's a Gas</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p> <p>Interactive Presentation</p>

6	<p>Module 1 Lesson 1: Read About - How do particles in a gas behave compared to particles in a liquid?</p> <p>Module 1 Lesson 1: Investigation - Still Solid</p> <p>Module 1 Lesson 1: Read About - What evidence is there that particles in a solid move?</p> <p>Module 1 Lesson 1: Collect Evidence - Part C</p>	Interactive Presentation Interactive Presentation Interactive Presentation Revisit CER from beginning of lesson
7	<p>Module 1 Lesson 1: Lab - In Hot Water</p> <p>Module 1 Lesson 1: 3D Thinking Question</p>	Interactive Presentation Collaboration kit for supplies Interactive Presentation
8	<p>Module 1 Lesson 1: Read About - How does the total amount of a substance affect its energy?</p> <p>Module 1 Lesson 1: Collect Evidence - Part D</p> <p>Module 1 Lesson 1: Lesson Review</p> <p>Module 1 Lesson 1: Lesson Check</p> <p>Module 1 Lesson 1: Review CER</p>	Interactive Presentation Revisit CER from beginning of lesson Interactive Presentation Lesson Check
9	<p>Module 1 Lesson 2: What's the Difference? Science Probe</p> <p>Module 1 Lesson 2: Encounter the</p>	Interactive Presentation Interactive Presentation

	Phenomenon - States of Matter Module 1 Lesson 2: Explain the Phenomenon - CER	Interactive Presentation
10	Module 1 Lesson 2: Lab - Phase Changes	Interactive Presentation Collaboration kit for supplies Reading Essentials
11	Module 1 Lesson 2: Read About - What happens to temperature...Changes Between Solids and Liquids Module 1 Lesson 2: Investigation - Next Phase	Interactive Presentation Foldables Interactive Presentation
12	Module 1 Lesson 2: Read About: What happens to temperature...Changes Between Gases and Liquids Module 1 Lesson 2: 3D Thinking Question Module 1 Lesson 2: Collect Evidence - Part A	Interactive Presentation Interactive Presentation Revisit CER from beginning of lesson
13	Module 1 Lesson 2: Investigation - Changing Energy Module 1 Lesson 2: Read About - What happens to particles and energy during...Particle Arrangement Module 1 Lesson 2: 3D Thinking Question Module 1 Lesson 2: Read About - What happens to particles and energy	Interactive Presentation Interactive Presentation Interactive Presentation Interactive Presentation

	<p>during...Heating Curves</p> <p>Module 1 Lesson 2: 3D Thinking Question</p>	Interactive Presentation
14	<p>Module 1 Lesson 2: Collect Evidence - Part B</p> <p>Module 1 Lesson 2: Investigation - Turn Up the Heat</p> <p>Module 1 Lesson 2: Read About - How do the melting and boiling points of different substances...</p> <p>Module 1 Lesson 2: Collect Evidence - Part C</p>	<p>Revisit CER from beginning of lesson</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
15	<p>Module 1 Lesson 2: Investigation - Energy Factors</p> <p>Module 1 Lesson 2: Read About - What factors determine the total energy of a substance?</p> <p>Module 1 Lesson 2: 3D Thinking Question</p> <p>Module 1 Lesson 2: Lesson Review</p> <p>Module 1 Lesson 2: Lesson Check</p> <p>Module 1 Lesson 2: Review CER</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Lesson Check</p>
16	<p>Module 1 Lesson 3: Hot Soup Science Probe</p> <p>Module 1 Lesson 3: Encounter the</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p>

	<p>Phenomenon</p> <p>Module 1 Lesson 3: Explain the Phenomenon - CER</p>	Interactive Presentation
17	<p>Module 1 Lesson 3: Lab - Transferring Temperature</p> <p>Module 1 Lesson 3: Read About - Where does thermal energy go? Systems and Energy</p> <p>Module 1 Lesson 3: 3D Thinking Question</p>	<p>Interactive Presentation Collaboration Kit for supplies Reading Essentials</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
18	<p>Module 1 Lesson 3: Read About - Where does thermal energy...Direction of Thermal Energy Transfer</p> <p>Module 1 Lesson 3: 3D Thinking Question</p> <p>Module 1 Lesson 3: Read About - Where does thermal energy go? Conduction</p> <p>Module 1 Lesson 3: 3D Thinking Question</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation Foldables</p> <p>Interactive Presentation</p>
19	<p>Module 1 Lesson 3: Lab - Transferring Temperature Over Time</p> <p>Module 1 Lesson 3: Read About - Where does thermal energy go? Thermal Equilibrium</p> <p>Module 1 Lesson 3: Collect Evidence - Part A</p>	<p>Interactive Presentation Collaboration Kit for supplies</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>

20	<p>Module 1 Lesson 3: Lab - Lights On</p> <p>Module 1 Lesson 3: Read About - How does thermal energy transfer when objects are...Radiation</p> <p>Module 1 Lesson 3: 3D Thinking Question</p>	<p>Interactive Presentation Collaboration Kit for supplies</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
21	<p>Module 1 Lesson 3: Read About - How does thermal energy transfer when...Earth Science Connection</p> <p>Module 1 Lesson 3: Collect Evidence - Part B</p> <p>Module 1 Lesson 3: Investigation - Rising Liquids</p> <p>Module 1 Lesson 3: Read About - How else does thermal energy transfer in liquids and gases?</p> <p>Module 1 Lesson 3: Collect Evidence - Part C</p>	<p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
22	<p>Module 1 Lesson 3: Lesson Review</p> <p>Module 1 Lesson 3: Lesson Check</p> <p>Module 1 Lesson 3: Review CER</p> <p>Module 1 Lesson 4: Is the cup hot? Science Probe</p>	<p>Interactive Presentation</p> <p>Lesson Check</p> <p>Interactive Presentation</p>
23	Module 1 Wrap Up	Interactive Presentation

24	Module 1 Test	
25	<p>Module 2 Opener</p> <p>Module 2 Lesson 1: Describing Atoms Science Probe</p> <p>Module 2 Lesson 1: Encounter the Phenomenon</p>	<p>Interactive Presentation Module Pretest Module Vocabulary List</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
26	<p>Module 2 Lesson 1: Explain the Phenomenon - CER</p> <p>Module 2 Lesson 1: Lab - Matter ID's</p> <p>Module 2 Lesson 1: Read About - What gives each state...Properties of States of Matter</p>	<p>Interactive Presentation</p> <p>Interactive Presentation Collaboration Kit for supplies</p> <p>Interactive Presentation Reading Essentials Foldable</p>
27	<p>Module 2 Lesson 1: Investigation - Particles in States of Matter</p> <p>Module 2 Lesson 1: Read About - What gives each state of matter its...Particle Movement</p> <p>Module 2 Lesson 1: 3D Thinking Question</p> <p>Module 2 Lesson 1: Collect Evidence - Part A</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
28	Module 2 Lesson 1: Investigation - Temperature and States of Matter	Interactive Presentation

	<p>Module 2 Lesson 1: Read About - What energy can a particle have? Temperature and Energy</p> <p>Module 2 Lesson 1: 3D Thinking Question</p>	Interactive Presentation Interactive Presentation
29	<p>Module 2 Lesson 1: Read About: What energy can a particle have? Attraction and Energy</p> <p>Module 2 Lesson 1: 3D Thinking Question</p> <p>Module 2 Lesson 1: Read About - What energy can a particle have? Thermal Energy</p> <p>Module 2 Lesson 1: Collect Evidence - Part B</p>	Interactive Presentation Interactive Presentation Interactive Presentation Revisit CER from beginning of lesson
30	<p>Module 2 Lesson 1: Read About - What makes up a substance?</p> <p>Module 2 Lesson 1: 3D Thinking Question</p> <p>Module 2 Lesson 1: Read About - What energy can a particle have? Matter and Atoms</p> <p>Module 2 Lesson 1: Investigation - Breaking Down Water</p>	Interactive Presentation Interactive Presentation Interactive Presentation Interactive Presentation
31	<p>Module 2 Lesson 1: Read About - What makes up a substance? Element Ratios</p> <p>Module 2 Lesson 1: Investigation -</p>	Interactive Presentation Interactive Presentation

	<p>Compound Ratios</p> <p>Module 2 Lesson 1: Read About - What makes up a substance?</p> <p>Module 2 Lesson 1: Collect Evidence - Part C</p>	<p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
32	<p>Module 2 Lesson 1: Investigation - Element Symbols</p> <p>Module 2 Lesson 1: Read About - How else can the elements in a substance be represented?</p> <p>Module 2 Lesson 1: 3D Thinking Question</p> <p>Module 2 Lesson 1: Collect Evidence - Part D</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
33	<p>Module 2 Lesson 1: Lesson Review</p> <p>Module 2 Lesson 1: Lesson Check</p> <p>Module 2 Lesson 1: Review CER</p>	<p>Interactive Presentation</p> <p>Lesson Check</p>
34	<p>Module 2 Lesson 2: Shrinking Bottles Science Probe</p> <p>Module 2 Lesson 2: Encounter the Phenomenon</p> <p>Module 2 Lesson 2: Explain the Phenomenon - CER</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
35	Module 2 Lesson 2: Lab - Growing Air	Interactive Presentation

	<p>Module 2 Lesson 2: Read About - What happens to the volume of a gas when thermal energy changes</p> <p>Module 2 Lesson 2: 3D Thinking Question</p>	<p>Collaboration Kit for supplies</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
36	<p>Module 2 Lesson 2: Lab - Energy on the Move</p> <p>Module 2 Lesson 2: Read About - How does thermal energy transfer between objects?</p> <p>Module 2 Lesson 2: 3D Thinking Question</p> <p>Module 2 Lesson 2: Collect Evidence - Part A</p>	<p>Interactive Presentation</p> <p>Collaboration Kit for supplies</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
37	<p>Module 2 Lesson 2: Lab - Don't Spill</p> <p>Module 2 Lesson 2: Read About - How can air hold up water? Particle Collisions</p> <p>Module 2 Lesson 2: 3D Thinking Question</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
38	<p>Module 2 Lesson 2: Read About - How can air hold up water? Units of Pressure</p> <p>Module 2 Lesson 2: Lab - Under Pressure</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p>
39	<p>Module 2 Lesson 2: Read About - How does pressure change when temperature changes?</p>	<p>Interactive Presentation</p>

	<p>Module 2 Lesson 2: Collect Evidence - Part B</p> <p>Module 2 Lesson 2: Read About - What happens to states of matter as...Phase Changes</p> <p>Module 2 Lesson 2: 3D Thinking Question</p>	<p>Revisit CER from beginning of lesson</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
40	<p>Module 2 Lesson 2: Read About - What happens to states of matter...Vaporization</p> <p>Module 2 Lesson 2: 3D Thinking Question</p> <p>Module 2 Lesson 2: Read About - What happens to states of matter...Earth Science Connection</p> <p>Module 2 Lesson 2: 3D Thinking Question</p> <p>Module 2 Lesson 2: Collect Evidence - Part C</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
41	<p>Module 2 Lesson 2: Lesson Review</p> <p>Module 2 Lesson 2: Lesson Check</p> <p>Module 2 Lesson 2: Review CER</p>	<p>Interactive Presentation</p> <p>Lesson Check</p>
42	<p>Module 2 Lesson 4: Now You See It, Now You Don't Science Probe</p> <p>Module 2 Lesson 4: Encounter the Phenomenon</p> <p>Module 2 Lesson 4: Explain the</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>

	Phenomenon - CER	
43	<p>Module 2 Lesson 4: Investigation - Organize the Elements</p> <p>Module 2 Lesson 4: Read About - How do elements differ? Types of Elemental Substances</p>	<p>Interactive Presentation</p> <p>Interactive Presentation Reading Essentials Foldables</p>
44	<p>Module 2 Lesson 4: Lab - Examining Elements</p> <p>Module 2 Lesson 4: Read About - How do elements differ? Properties of Metals and Nonmetals</p> <p>Module 2 Lesson 4: 3D Thinking Question</p>	<p>Interactive Presentation Collaboration Kit for supplies</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
45	<p>Module 2 Lesson 4: Collect Evidence - Part A</p> <p>Module 2 Lesson 4: Investigation - Organize the Compounds</p> <p>Module 2 Lesson 4: Read About - How do compounds differ? Types of Compounds</p>	<p>Revisit CER from beginning of lesson</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
46	<p>Module 2 Lesson 4: Lab - Comparing Compounds</p> <p>Module 2 Lesson 4: Read About - How do compounds...Ionic and Covalent Compounds</p>	<p>Interactive Presentation Collaboration Kit for supplies</p> <p>Interactive Presentation</p>
47	Module 2 Lesson 4: Investigation - Comparing Extended Structures	Interactive Presentation

	<p>Module 2 Lesson 4: Investigation - Comparing Molecules</p> <p>Module 2 Lesson 4: Read About - How do compounds differ? Polar Covalent Compounds</p> <p>Module 2 Lesson 4: 3D Thinking Question</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Interactive Presentation</p>
48	<p>Module 2 Lesson 4: Read About - How do elements differ? To Dissolve or Not To Dissolve</p> <p>Module 2 Lesson 4: 3D Thinking Question</p> <p>Module 2 Lesson 4: Collect Evidence - Part B</p>	<p>Interactive Presentation</p> <p>Interactive Presentation</p> <p>Revisit CER from beginning of lesson</p>
49	<p>Module 2 Lesson 4: Lesson Review</p> <p>Module 2 Lesson 4: Lesson Check</p> <p>Module 2 Lesson 4: Review CER</p>	<p>Interactive Presentation</p> <p>Lesson Check</p>
50	Module 2 Wrap Up	Interactive Presentation
51	Module 2 Test	
52	Benchmark Review	
53	Benchmark Review	
54	Grade 7 Unit 1 Benchmark	