

GLENCOE CORRELATION
INTRODUCTION TO PHYSICAL SCIENCE
LOUISIANA
 New Orleans Public Schools
 Physical Science Work Plan Grade 7

SCIENCE BENCHMARKS GRADES 5-8	PAGE REFERENCES
FIRST QUARTER PACING GUIDE	
SI-M-A8 utilizing safety procedures during scientific investigations.	SE: 19-20, 543 <i>Activity</i> 151, 152-153, 296, 302-303, 394-395, 488-489 <i>Health Integration</i> 457-458
SI-M-A3 using mathematics and appropriate tools and techniques to gather, analyze, and interpret data;	SE: 50-54, 56-59, 525-530, 533-535 <i>Activity</i> 151, 296, 426-427 <i>Math Skills Activity</i> 123 <i>Problem Solving Activity</i> 17, 350
SI-M-A1 identifying questions that can be used to design a scientific investigation;	SE: 6, 12-15, 27-29, 522 <i>Activity</i> 31, 60-61, 126-127, 184-185, 250-251, 276-277
SI-M-B1 recognizing that different kinds of questions guide different kinds of scientific investigations;	SE: 6-7, 522 <i>Activity</i> 32-33, 388 <i>Life Science Integration</i> 13, 384 <i>Physics Integration</i> 110 <i>Problem Solving Activity</i> 91, 244, 473
SI-M-B2 communicating that current scientific knowledge guides scientific investigations;	SE: 243-249, 383-387, 518 <i>Earth Science Integration</i> 356 <i>Health Integration</i> 47 <i>Life Science Integration</i> 195, 295 <i>Physics Integration</i> 80, 411 <i>Problem Solving Activity</i> 350
SI-M-B6 communicating that scientific investigations can result in new ideas, new methods or procedures, and new technologies;	SE: 11, 380-385, 392-393, 421-425 <i>Accidents in Science</i> 128-129 <i>National Geographic</i> 70-71, 312-313 <i>Science and History</i> 396-397 <i>Science and Society</i> 278-279
SI-M-B7 understanding that scientific development/technology is driven by societal needs and funding.	SE: <i>Accidents in Science</i> 428-429 <i>Chemistry Integration</i> 449 <i>National Geographic</i> 224-225 <i>Problem Solving Activity</i> 113, 244 <i>Science and History</i> 34-35, 154-155, 396-397 <i>Science and Society</i> 216-217, 278-279
SI-M-A2 designing and conducting a scientific investigation;	SE: 12-18 <i>Activity</i> 60-61, 126-127, 152-153, 184-185, 214-215, 250-251, 276-277, 334-335, 394-395
SI-M-A3 using mathematics and appropriate tools and techniques to gather, analyze, and interpret data;	SE: 50-54, 56-59, 525-530, 533-535 <i>Activity</i> 151, 296, 426-427 <i>Math Skills Activity</i> 123 <i>Problem Solving Activity</i> 17, 350

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SI-M-B3	understanding that mathematics, technology, and scientific techniques used in an experiment can limit or enhance the accuracy of scientific knowledge;	SE: 42-49, 56-59, 539-542 <i>Activity</i> 55, 126-127, 184-185 <i>MiniLab</i> 44, 262 <i>National Geographic</i> 46, 386
SI-M-A3	using mathematics and appropriate tools and techniques to gather, analyze, and interpret data;	SE: 50-54, 56-59, 525-530, 533-535 <i>Activity</i> 151, 296, 426-427 <i>Math Skills Activity</i> 123 <i>Problem Solving Activity</i> 17, 350
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SI-M-A3	using mathematics and appropriate tools and techniques to gather, analyze, and interpret data;	SE: 50-54, 56-59, 525-530, 533-535 <i>Activity</i> 151, 296, 426-427 <i>Math Skills Activity</i> 123 <i>Problem Solving Activity</i> 17, 350
SI-M-B3	understanding that mathematics, technology, and scientific techniques used in an experiment can limit or enhance the accuracy of scientific knowledge;	SE: 42-49, 56-59, 539-542 <i>Activity</i> 55, 126-127, 184-185 <i>MiniLab</i> 44, 262 <i>National Geographic</i> 46, 386
SI-M-A4	developing descriptions, explanations, and graphs using data;	SE: 28-30, 56-59, 528-531 <i>Activity</i> 55, 60-61, 296, 302-303, 460-461 <i>Problem Solving Activity</i> 17, 244
SI-M-A5	developing models and predictions using the relationships between data and explanations;	SE: 21-26, 76-81 <i>Activity</i> 94-95, 214-215, 263, 460-461 <i>Physics Integration</i> 80, 411 <i>Science and Society</i> 304-305, 462-463
SI-M-B6	communicating that scientific investigations can result in new ideas, new methods or procedures, and new technologies;	SE: 11, 380-385, 392-393, 421-425 <i>Accidents in Science</i> 128-129 <i>National Geographic</i> 70-71, 312-313 <i>Science and History</i> 396-397 <i>Science and Society</i> 278-279
SI-M-A6	comparing alternative explanations and predictions;	SE: 7, 27-30, 76-81, 531 <i>Activity</i> 31, 88 <i>Physics Integration</i> 411 <i>Science and History</i> 96-97 <i>Science and Society</i> 304-305, 462-463
SI-M-B4	using data and logical arguments to propose, modify, or elaborate on principles and models;	SE: <i>Activity</i> 460-461, 488-489 <i>National Geographic</i> 46, 181, 386 <i>Problem Solving Activity</i> 91, 113, 244 <i>Science and Society</i> 304-305, 462-463
SI-M-A7	communicating scientific procedures, information, and explanations;	SE: 16-17, 25, 28-29, 42-49, 56-59, 531 <i>Activity</i> 32-33, 488-489 <i>Problem Solving Activity</i> 17, 244

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SI-M-B5	understanding that scientific knowledge is enhanced through peer review, alternative explanations, and constructive criticism;	SE: 12-17, 26, 28-30, 75-81, 530-531 <i>Activity</i> 31 <i>National Geographic</i> 84 <i>Physics Integration</i> 80, 411
PS-M-A1	investigating, measuring, and communicating the properties of different substances which are independent of the amount of the substance;	SE: 104-108, 114-116, 138, 141-144 <i>Activity</i> 117 <i>Explore Activity</i> 103 <i>Math Skills Activity</i> 137 <i>National Geographic</i> 112
PS-M-A1	investigating, measuring, and communicating the properties of different substances which are independent of the amount of the substance;	SE: 104-108, 114-116, 138, 141-144 <i>Activity</i> 117 <i>Explore Activity</i> 103 <i>Math Skills Activity</i> 137 <i>National Geographic</i> 112
PS-M-A3	grouping substances according to similar properties and/or behaviors;	SE: 82-87, 89-90, 104-108, 139-144, 529 <i>Activity</i> 88, 94-95, 152-153 <i>Earth Science Integration</i> 93
PS-M-A2	understanding that all matter is made up of particles called atoms and that atoms of different elements are different;	SE: 75-77, 82-87, 440 <i>Activity</i> 88
PS-M-A4	understanding that atoms and molecules are perpetually in motion;	SE: 109-116, 145-146, 290-291 <i>Activity</i> 117 TWE: IM 237
PS-M-A5	investigating the relationships among temperature, molecular motion, phase changes, and physical properties of matter;	SE: 109-116, 136-140, 145-146, 286-288, 290-292, 297-298 <i>Activity</i> 117 <i>Science and Society</i> 216-217
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PS-M-A6	investigating chemical reactions between different substances to discover the new substances have new physical and chemical properties;	SE: 89-90, 141-144, 147-150 <i>Accidents in Science</i> 128-129 <i>Activity</i> 151 <i>Field Guide</i> 498-500 <i>Science and History</i> 154-155
PS-M-A6	investigating chemical reactions between different substances to discover the new substances have new physical and chemical properties;	SE: 89-90, 141-144, 147-150 <i>Accidents in Science</i> 128-129 <i>Activity</i> 151 <i>Field Guide</i> 498-500 <i>Science and History</i> 154-155
PS-M-C7	understanding that energy is involved in chemical reactions;	SE: 148, 231, 242, 449 <i>Activity</i> 151 <i>Field Guide</i> 499-500 <i>Life Science Integration</i> 235 <i>National Geographic</i> 236 TWE: CH 150, 451

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PS-M-A8	discovering and recording how factors such as temperature influence chemical reactions;	SE: 148, 500
PS-M-A7	understanding that during a chemical reaction in a closed system, the mass of the products is equal to that of the reactants;	SE: 76 TWE: LD 77
PS-M-A9	identifying elements and compounds found in common foods, clothing, household materials, and automobiles.	SE: 89-90, 139-140, 450 <i>Activity</i> 94-95 <i>Chemistry Integration</i> 449 <i>Field Guide</i> 498-501 <i>Life Science Integration</i> 142 <i>National Geographic</i> 70-71, 162-163 TWE: CB 128
PS-M-B1	describing and graphing the motions of objects;	SE: 166-170, 172-176 <i>Activity</i> 183 <i>Accidents in Science</i> 186-187 <i>National Geographic</i> 181 TWE: CH 171
PS-M-B2	recognizing different forces and describing their effects (gravity, electrical, magnetic);	SE: 194-199, 201-206, 264-268, 443, 480-483 <i>Activity</i> 488-489 <i>Explore Activity</i> 439, 469 <i>Field Guide</i> 502-505
PS-M-B4	describing how forces acting on an object will reinforce or cancel one another, depending upon their direction and magnitude;	SE: 195, 200-205, 207, 211-212, 480-483 <i>Activity</i> 214-215 <i>National Geographic</i> 209 <i>Science and Society</i> 216-217
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PS-M-C2	understanding the different kinds of energy transformations and the fact that energy can be neither destroyed nor created;	SE: 233-239, 241-249, 262, 297-301, 448, 480 <i>Activity</i> 250-251, 488-489 TWE: TPK 264
PS-M-B3	understanding that, when an object is not being subjected to a force, it will continue to move at a constant speed and in a straight line;	SE: 196-197, 204-205, 207 <i>Activity</i> 213 <i>Science and Society</i> 216-217

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PS-M-B4	describing how forces acting on an object will reinforce or cancel one another, depending upon their direction and magnitude;	SE: 195, 200-205, 207, 211-212, 480-483 <i>Activity 214-215</i> <i>National Geographic 209</i> <i>Science and Society 216-217</i>
PS-M-B5	understanding that unbalanced forces will cause changes in the speed or direction of an object's motion.	SE: 195-196, 200-205, 207-208, 210 <i>Activity 213, 214-215</i> <i>Science and Society 216-217</i>
PS-M-B4	describing how forces acting on an object will reinforce or cancel one another, depending upon their direction and magnitude;	SE: 195, 200-205, 207, 211-212, 480-483 <i>Activity 214-215</i> <i>National Geographic 209</i> <i>Science and Society 216-217</i>
PS-M-B5	understanding that unbalanced forces will cause changes in the speed or direction of an object's motion.	SE: 195-196, 200-205, 207-208, 210 <i>Activity 213, 214-215</i> <i>Science and Society 216-217</i>
PS-M-B4	describing how forces acting on an object will reinforce or cancel one another, depending upon their direction and magnitude;	SE: 195, 200-205, 207, 211-212, 480-483 <i>Activity 214-215</i> <i>National Geographic 209</i> <i>Science and Society 216-217</i>
PS-M-C1	identifying and comparing the characteristics of different types of energy;	SE: 228-232, 235-239, 241-249, 289-290, 447-448, 456-457 <i>Activity 250-251</i> <i>Field Guide 510-513</i>
PS-M-C3	understanding that the sun is a major source of energy and that energy arrives at the Earth's surface as light with a range of wavelengths;	SE: 241-242, 245-246, 382-384 <i>National Geographic 386</i> TWE: FYI 405
FOURTH QUARTER PACING GUIDE		
PS-M-C6	describing the types of energy that can be involved, converted, or released in electrical circuits;	SE: 236, 448-450, 454-456, 477-483 <i>Activity 488-489</i> TWE: CH 451
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PS-M-C6 describing the types of energy that can be involved, converted, or released in electrical circuits;	SE: 236, 448-450, 454-456, 477-483 <i>Activity</i> 488-489 TWE: CH 451
PS-M-C4 observing and describing the interactions of light and matter (reflection, refraction, absorption, transmission, scattering);	SE: 405-406, 409-414, 416-420, 422-425 <i>Accidents in Science</i> 428-429 <i>Activity</i> 415, 426-427 TWE: QD 407
PS-M-C5 investigating and describing the movement of heat and the effects of heat in objects and systems;	SE: 237-238, 245-247, 290-295, 297-301 <i>Activity</i> 296, 302-303 <i>Science and Society</i> 304-305 TWE: FYI 230
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Codes Used for TWE Pages

CB	Content Background
CH	Challenge
FYI	Teacher FYI
IM	Identifying Misconceptions
LD	Lab Demonstration
QD	Quick Demo
TPK	Tie to Prior Knowledge