

2nd Grade SCIENCE CURRICULUM

	Suggested Time Line <i>How much time will be spent of this learning?</i>	Essential Questions and Content <i>What will be taught? (broken down by chapter/section)</i>	NJCCC Standards <i>What state standards will be met by these objectives?</i>	Instructional Objectives <i>The students will be able to...</i>	Assessment <i>What evidence will I collect that demonstrates that the students have achieved the objective?</i>	Instructional Domain <i>How will the learning be structured</i>	Instructional Activities <i>What will the students do to achieve the objective?</i>
Unit E- Matter and Energy							
Chapter 10			5.6-A.1 5.6-A.3		<ul style="list-style-type: none"> • Written Reviews and Tests • Classroom observations • Ongoing lesson assessment • Performance assessment • Portfolio assessment • Lesson activities • Open ended questions • Critical thinking questions • Group discussion • Written and oral tests and quizzes • Projects • Self Assessment • Presentations • Rubrics 	<ul style="list-style-type: none"> • Differentiated instruction • Flexible Grouping • Overhead • Graphic Organizers • Teacher modeling • Guided and independent reading • Guided and independent writing • Conferencing • Technology • Direct Instruction 	<ul style="list-style-type: none"> • Observe • Classify • Measure • Communicate • Infer • Predict • Collect, record, and interpret data • Make hypotheses • Experiment • Making and using models • PODs • Discussions • Cooperative Learning Activities • Word Wall Vocabulary • Graphic Organizers • Critical Viewing and Listening
Lesson 1		How can you compare matter?	<ol style="list-style-type: none"> 1. Identify materials as solids, liquids, or gases 2. Classify objects according to their properties 				
Lesson 2		How does matter change?	<ol style="list-style-type: none"> 1. Identify ways in which matter can change 2. Identify causes of changes, such as heating and cooling 				
Lesson 3		How does matter look up close?	<ol style="list-style-type: none"> 1. Recognize that objects are composed of small parts that may be seen with a magnifier 2. Use tools to observe objects 				
Chapter 11			5.7-B.1		<ul style="list-style-type: none"> • Written Reviews and Tests • Classroom observations • Ongoing lesson assessment • Performance assessment • Portfolio assessment • Lesson activities • Open ended 	<ul style="list-style-type: none"> • Differentiated instruction • Flexible Grouping • Overhead • Graphic Organizers • Teacher modeling • Guided and independent reading • Guided and independent writing • Conferencing 	<ul style="list-style-type: none"> • Observe • Classify • Measure • Communicate • Infer • Predict • Collect, record, and interpret data • Make hypotheses • Experiment • Making and using
Lesson 1		How is sound made?	<ol style="list-style-type: none"> 1. Explain that sound is made by vibrating objects 2. Describe how sound is heard by the human ear 				
Lesson 2		How does sound travel?	<ol style="list-style-type: none"> 1. Explain that sound travels differently through different materials 2. Describe how sound can be controlled 				

					questions	• Technology	models
Lesson 3		How do sounds change?		1. Recognize that sounds can be described by pitch and volume 2. Describe how the pitch and volume of a sound can be changed	<ul style="list-style-type: none"> • Critical thinking questions • Group discussion • Written and oral tests and quizzes • Projects • Self Assessment • Presentations • Rubrics 	<ul style="list-style-type: none"> • Direct Instruction 	<ul style="list-style-type: none"> • PODs • Discussions • Cooperative Learning Activities • Word Wall Vocabulary • Graphic Organizers • Critical Viewing and Listening

	Suggested Time Line <i>How much time will be spent of this learning?</i>	Essential Questions and Content <i>What will be taught? (broken down by chapter/section)</i>	NJCCC Standards <i>What state standards will be met by these objectives?</i>	Instructional Objectives <i>The students will be able to...</i>	Assessment <i>What evidence will I collect that demonstrates that the students have achieved the objective?</i>	Instructional Domain <i>How will the learning be structured</i>	Instructional Activities <i>What will the students do to achieve the objective?</i>
Unit F- Motion and Forces							
Chapter 12			5.7-A.1		<ul style="list-style-type: none"> • Written Reviews and Tests • Classroom observations • Ongoing lesson assessment • Performance assessment • Portfolio assessment • Lesson activities • Open ended questions • Critical thinking questions • Group discussion • Written and oral tests and quizzes • Projects • Self Assessment • Presentations • Rubrics 	<ul style="list-style-type: none"> • Differentiated instruction • Flexible Grouping • Overhead • Graphic Organizers • Teacher modeling • Guided and independent reading • Guided and independent writing • Conferencing • Technology • Direct Instruction 	<ul style="list-style-type: none"> • Observe • Classify • Measure • Communicate • Infer • Predict • Collect, record, and interpret data • Make hypotheses • Experiment • Making and using models • PODs • Discussions • Cooperative Learning Activities • Word Wall Vocabulary • Graphic Organizers • Critical Viewing and Listening
Lesson 1		How do things move?	<ol style="list-style-type: none"> 1. Describe ways that objects can move 2. Recognize that the position of an object can be described by locating it in relation to another object 3. Explain how gravity affects motion 				
Lesson 2		What do forces do?	<ol style="list-style-type: none"> 1. Explain that pushes and pulls are forces that change the positions of objects 2. Recognize the relationship between the size of a force and the motion of an object 				
Lesson 3		What can you do with motion?	<ol style="list-style-type: none"> 1. Describe how motion can be measured 2. Explain how machines can make work easier 				
Chapter 13			5.7-A.2		<ul style="list-style-type: none"> • Written Reviews and Tests • Classroom observations • Ongoing lesson assessment • Performance assessment • Portfolio assessment • Lesson activities • Open ended questions • Critical thinking 	<ul style="list-style-type: none"> • Differentiated instruction • Flexible Grouping • Overhead • Graphic Organizers • Teacher modeling • Guided and independent reading • Guided and independent writing • Conferencing • Technology • Direct Instruction 	<ul style="list-style-type: none"> • Observe • Classify • Measure • Communicate • Infer • Predict • Collect, record, and interpret data • Make hypotheses • Experiment • Making and using models • PODs
Lesson 1		What can magnets do?	<ol style="list-style-type: none"> 1. Recall that magnets have stronger areas called poles 2. Recognize that magnets attract and repel each other 				
Lesson 2		What materials do magnets attract?	<ol style="list-style-type: none"> 1. Identify materials that are attracted to magnets 2. Describe everyday uses of magnets 				
Lesson 3		What is a magnetic field?	<ol style="list-style-type: none"> 1. Recognize that a magnetic field does not pass through 				

				<p>all materials</p> <p>2. Identify materials through which a magnetic field can pass</p>	<p>questions</p> <ul style="list-style-type: none"> • Group discussion • Written and oral tests and quizzes • Projects • Self Assessment • Presentations • Rubrics 		<ul style="list-style-type: none"> • Discussions • Cooperative Learning Activities • Word Wall Vocabulary • Graphic Organizers • Critical Viewing and Listening