

EVERGREEN COMMUNITY CHARTER SCHOOL CURRICULUM
SCIENCE

Subject: Environmental Science
Grade: 12

Reading Informational Text

Students read, Understand, and respond to informational text – with emphasis on comprehension, making connections among ideas and between texts with focus on textual evidence.

Writing

Students write for different purposes and audiences. Students write clear and focused text to convey a well-defined perspective and appropriate content.

PA Core Standards/Assessment Anchors	Methods/Materials/Evaluation	Objectives
<p>CC.3.5.12.A-J</p> <p>CC.3.6.12.A-J</p> <p>4.1.12.F</p>	<p><u>Unit 1</u>: Introduction to Environmental Science</p> <p>Resources: Houghton, Mifflin, Harcourt – <u>Environmental Science</u>, 2013, and accompanying workbooks</p> <p>Teacher Developed activities and worksheets including resources from current science literature, videos, internet sites, outside reading.</p> <p>Methods:</p> <ul style="list-style-type: none"> • Observing • Measuring • Data Collection • Pattern recognition • Reasoning and problem solving <p>Evaluation Strategies:</p> <ul style="list-style-type: none"> • Written tests • Quizzes • Projects • Demonstrations • Homework • Class discussion 	<p>Explain/Describe</p> <ul style="list-style-type: none"> • Understanding our Environment • The Environment and Society • Scientific Methods • Statistics and Models • Making Informed Decisions • The Geosphere • The Atmosphere • The Hydrosphere and Biosphere

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<p>CC.3.5.12.A-J CC.3.6.12.A-J 4.1.12.A-F 4.2.12.A-D 4.5.12.D</p>	<p><u>Unit 2: Ecology</u> Resources: Houghton, Mifflin, Harcourt – <u>Environmental Science</u>, 2013, and accompanying workbooks Teacher Developed activities and worksheets including resources from current science literature, videos, internet sites, outside reading. Methods: <ul style="list-style-type: none"> • Observing • Measuring • Data Collection • Pattern recognition • Reasoning and problem solving Evaluation Strategies: <ul style="list-style-type: none"> • Written tests • Quizzes • Projects • Demonstrations • Homework • Class discussion </p>	<p>Explain/Describe</p> <ul style="list-style-type: none"> • Ecosystems • Evolution • The Diversity of Living Things • Energy Flow in Ecosystems • The Cycling of Matter • How Ecosystems Change • What is a Biome • Forest Biomes • Grassland, Desert, and Tundra Biomes • Freshwater Ecosystems • Marine Ecosystems

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<p>CC.3.5.12.A-J CC.3.6.12.A-J 4.1.12.A-F</p>	<p><u>Unit 3: Populations</u></p> <p>Resources: Houghton, Mifflin, Harcourt – <u>Environmental Science</u>, 2013, and accompanying workbooks</p> <p>Teacher Developed activities and worksheets including resources from current science literature, videos, internet sites, outside reading.</p> <p>Methods:</p> <ul style="list-style-type: none"> • Observing • Measuring • Data Collection • Pattern recognition • Reasoning and problem solving <p>Evaluation Strategies:</p> <ul style="list-style-type: none"> • Written tests • Quizzes • Projects • Demonstrations • Homework • Class discussion 	<p>Explain/Describe:</p> <ul style="list-style-type: none"> • How Populations Change in Size • How Species Interact with Each Other • Studying Homan Populations • Changing Population Trends • What is Biodiversity • Biodiversity at Risk • The Future of Biodiversity

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<p>CC.3.5.12.A-J CC.3.6.12.A-J 4.4.12.A-E</p>	<p><u>Unit 4: Water, Air, and Land</u></p> <p>Resources: Houghton, Mifflin, Harcourt – <u>Environmental Science</u>, 2013, and accompanying workbooks</p> <p>Teacher Developed activities and worksheets including resources from current science literature, videos, internet sites, outside reading. , videos, internet sites, outside reading.</p> <p>Methods:</p> <ul style="list-style-type: none"> • Observing • Measuring • Data Collection • Pattern recognition • Reasoning and problem solving <p>Evaluation Strategies:</p> <ul style="list-style-type: none"> • Written tests • Quizzes • Projects • Demonstrations • Homework • Class discussions 	<p>Explain/Describe:</p> <ul style="list-style-type: none"> • Water Resources • Water Use and Management • Water Pollution • What Causes Air Pollution • Air, Noise, and Light Pollution • Acid Precipitation • Climate • The Ozone Shield • Climate Change • How we use Land • Urban Land Use • Land Management and Conservation • Feeding the World • Crops and Soil • Animals and Agriculture

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<p>CC.3.5.12.A-J CC.3.6.12.A-J 4.3.12.A-C</p>	<p><u>Unit 5: Mineral and Energy Resources</u></p> <p>Resources: Houghton, Mifflin, Harcourt – <u>Environmental Science</u>, 2013, and accompanying workbooks</p> <p>Teacher Developed activities and worksheets including resources from current science literature, videos, internet sites, outside reading.</p> <p>Methods:</p> <ul style="list-style-type: none"> • Observing • Measuring • Data Collection • Pattern recognition • Reasoning and problem solving <p>Evaluation Strategies:</p> <ul style="list-style-type: none"> • Written tests • Quizzes • Projects • Demonstrations • Homework • Class discussion 	<p>Explain/Describe:</p> <ul style="list-style-type: none"> • Minerals and Mineral Resources • Mineral Exploration and Mining • Mining Regulations and Mine Reclamation • Energy Resources and Fossils Fuels • Nuclear Energy • Renewable Energy • Developing Energy Technologies • Solid Waste • Reducing Solid Waste • Hazardous Waste

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