

**Grade 3/4/5 Long Range Plans 2009-2010**  
**Grade 4 curriculum with Mr. Phelps**

**Course Overview:**

An elementary science program engages students in a process of inquiry and problem solving in which they develop both knowledge and skills. The purpose of the program is to encourage and stimulate children's learning by nurturing their sense of wonderment, by developing skill and confidence in investigating their surroundings and by building a foundation of experience and understanding upon which later learning can be based. Students focus on the following topics in the grade 4 curriculum: Waste and Our World, Wheels and Levers, Building Devices and Vehicles That Move, Light and Shadow, and Plant Growth and Changes.

	<b>September</b>	<b>October</b>	<b>November</b>	<b>December</b>	<b>January</b>
<b>Topic:</b>	Introduction and Unit 1: Waste and our world	Unit 1: Waste and our world	Unit 1: cont'd and Unit 2: Wheels and Levers	Unit 2: Wheels and Levers	Unit 2: cont'd and Unit 3: Building devices and vehicles that move
<b>Resources:</b>	- Edmonton Public Schools resource manuals - Learn Alberta, Black Gold, and 2 learn websites.	- Edmonton Public Schools resource manuals - Learn Alberta, Black Gold, and 2 learn websites.	- Edmonton Public Schools resource manuals - Learn Alberta, Black Gold, and 2 learn websites.	- Edmonton Public Schools resource manuals - Learn Alberta, Black Gold, and 2 learn websites.	- Edmonton Public Schools resource manuals - Learn Alberta, Black Gold, and 2 learn websites.
<b>Instructional Approaches:</b>	- Lecture - Readings - Labs - Demonstrations - Problem solving - Concept attainment/maps - Cooperative learning groups - Jigsaw	- Lecture - Readings - Labs - Demonstrations - Problem solving - Concept attainment/maps - Cooperative learning groups - Jigsaw	- Lecture - Readings - Labs - Demonstrations - Problem solving - Concept attainment/maps - Cooperative learning groups - Jigsaw	- Lecture - Readings - Labs - Demonstrations - Problem solving - Concept attainment/maps - Cooperative learning groups - Jigsaw	- Lecture - Readings - Labs - Demonstrations - Problem solving - Concept attainment/maps - Cooperative learning groups - Jigsaw

<b>Special Activities:</b>	<ul style="list-style-type: none"> <li>- Michael recycle fun book</li> <li>- Landfill comparison activity.</li> <li>- Garbage sort</li> <li>- Mold garden</li> </ul>	<ul style="list-style-type: none"> <li>- Michael recycle fun book</li> <li>- Landfill comparison activity.</li> <li>- Garbage sort</li> <li>- Mold garden</li> </ul>	<ul style="list-style-type: none"> <li>- Lift the teacher demonstration</li> <li>- Broomstick war</li> <li>- Drink can dragsters</li> <li>- Pulley power</li> </ul>	<ul style="list-style-type: none"> <li>- Lift the teacher demonstration</li> <li>- Broomstick war</li> <li>- Drink can dragsters</li> <li>- Pulley power</li> </ul>	<ul style="list-style-type: none"> <li>- Box crane</li> <li>- Track mobile</li> <li>- Powering Air: powered go carts</li> <li>- Ferry race</li> </ul>
<b>Evaluation:</b>	<p><b>Formative</b></p> <ul style="list-style-type: none"> <li>- Labs</li> <li>- Activities</li> <li>- Assignments</li> <li>- Presentations</li> </ul> <p><b>Summative:</b></p> <ul style="list-style-type: none"> <li>- Vocabulary quiz week 1-7</li> <li>- 3 R's quiz</li> <li>- Water treatment quiz</li> <li>- Concept review unit exam.</li> </ul>	<p><b>Formative</b></p> <ul style="list-style-type: none"> <li>- Labs</li> <li>- Activities</li> <li>- Assignments</li> <li>- Presentations</li> </ul> <p><b>Summative:</b></p> <ul style="list-style-type: none"> <li>- Vocabulary quiz week 1-7</li> <li>- 3 R's quiz</li> <li>- Water treatment quiz</li> <li>- Concept review unit exam.</li> </ul>	<p><b>Formative</b></p> <ul style="list-style-type: none"> <li>- Labs</li> <li>- Activities</li> <li>- Assignments</li> <li>- Presentations</li> </ul> <p><b>Summative:</b></p> <ul style="list-style-type: none"> <li>- Vocabulary quiz week 1-6</li> <li>- Levers quiz</li> <li>Gears and pulleys quiz</li> <li>- Concept review unit exam.</li> </ul>	<p><b>Formative</b></p> <ul style="list-style-type: none"> <li>- Labs</li> <li>- Activities</li> <li>- Assignments</li> <li>- Presentations</li> </ul> <p><b>Summative:</b></p> <ul style="list-style-type: none"> <li>- Vocabulary quiz week 1-6</li> <li>- Levers quiz</li> <li>- Gears and pulleys quiz</li> <li>- Concept review unit exam.</li> </ul>	<p><b>Formative</b></p> <ul style="list-style-type: none"> <li>- Labs</li> <li>- Activities</li> <li>- Assignments</li> <li>- Presentations</li> </ul> <p><b>Summative:</b></p> <ul style="list-style-type: none"> <li>- Vocabulary quiz week 1-4.</li> <li>- Performance assessment build it activity.</li> <li>- Concept review unit exam.</li> </ul>

	<b>February</b>	<b>March</b>	<b>April</b>	<b>May</b>	<b>June</b>
<b>Topic:</b>	Unit 3: Building devices and vehicles that move	Unit 4: Light and Shadows	Unit 4: Light and Shadows	Unit 5: Plant growth and changes	Unit 5: Plant growth and changes
<b>Resources:</b>	<ul style="list-style-type: none"> <li>- Edmonton Public Schools resource manuals</li> <li>- Learn Alberta, Black Gold, and 2 learn websites.</li> </ul>	<ul style="list-style-type: none"> <li>- Edmonton Public Schools resource manuals</li> <li>- Learn Alberta, Black Gold, and 2 learn websites.</li> </ul>	<ul style="list-style-type: none"> <li>- Edmonton Public Schools resource manuals</li> <li>- Learn Alberta, Black Gold, and 2 learn websites.</li> </ul>	<ul style="list-style-type: none"> <li>- Edmonton Public Schools resource manuals</li> <li>- Learn Alberta, Black Gold, and 2 learn websites.</li> </ul>	<ul style="list-style-type: none"> <li>- Edmonton Public Schools resource manuals</li> <li>- Learn Alberta, Black Gold, and 2 learn websites.</li> </ul>
<b>Instructional Approaches:</b>	<ul style="list-style-type: none"> <li>- Lecture</li> <li>- Readings</li> <li>- Labs</li> <li>- Demonstrations</li> <li>- Problem solving</li> <li>- Concept attainment/maps</li> <li>- Cooperative learning groups</li> <li>- Jigsaw</li> </ul>	<ul style="list-style-type: none"> <li>- Lecture</li> <li>- Readings</li> <li>- Labs</li> <li>- Demonstrations</li> <li>- Problem solving</li> <li>- Concept attainment/maps</li> <li>- Cooperative learning groups</li> <li>- Jigsaw</li> </ul>	<ul style="list-style-type: none"> <li>- Lecture</li> <li>- Readings</li> <li>- Labs</li> <li>- Demonstrations</li> <li>- Problem solving</li> <li>- Concept attainment/maps</li> <li>- Cooperative learning groups</li> <li>- Jigsaw</li> </ul>	<ul style="list-style-type: none"> <li>- Lecture</li> <li>- Readings</li> <li>- Labs</li> <li>- Demonstrations</li> <li>- Problem solving</li> <li>- Concept attainment/maps</li> <li>- Cooperative learning groups</li> <li>- Jigsaw</li> </ul>	<ul style="list-style-type: none"> <li>- Lecture</li> <li>- Readings</li> <li>- Labs</li> <li>- Demonstrations</li> <li>- Problem solving</li> <li>- Concept attainment/maps</li> <li>- Cooperative learning groups</li> <li>- Jigsaw</li> </ul>
<b>Special Activities:</b>	<ul style="list-style-type: none"> <li>- Box crane</li> <li>- Track mobile</li> <li>- Powering Air: powered go carts</li> <li>- Ferry race</li> </ul>	<ul style="list-style-type: none"> <li>- Making a box camera</li> <li>- The case of the unbroken straw</li> <li>- Making a hand lens.</li> </ul>	<ul style="list-style-type: none"> <li>- Making a box camera</li> <li>- The case of the unbroken straw</li> <li>- Making a hand lens.</li> </ul>	<ul style="list-style-type: none"> <li>- The great plant escape: case 1-6.</li> <li>- Requirements of plants</li> <li>- Growing flowers</li> <li>- Nurture a plant</li> </ul>	<ul style="list-style-type: none"> <li>- The great plant escape: case 1-6.</li> <li>- Requirements of plants</li> <li>- Growing flowers</li> <li>- Nurture a plant</li> </ul>

<b>Evaluation:</b>	<b>Formative</b> - Labs - Activities - Assignments - Presentations <b>Summative:</b> - Vocabulary quiz week 1-4. - Performance assessment build it activity. - Concept review unit exam.	<b>Formative</b> - Labs - Activities - Assignments - Presentations <b>Summative:</b> - Vocabulary quiz week 1-5. - Reflection and refraction quiz - Concept review unit exam.	<b>Formative</b> - Labs - Activities - Assignments - Presentations <b>Summative:</b> - Vocabulary quiz week 1-5. - Reflection and refraction quiz - Concept review unit exam.	<b>Formative</b> - Labs - Activities - Assignments - Presentations <b>Summative:</b> - Vocabulary week quiz 1-4 - The importance of plants quiz - Nurturing a plant quiz - Concept review unit exam	<b>Formative</b> - Labs - Activities - Assignments - Presentations <b>Summative:</b> - Vocabulary week quiz 1-4 - The importance of plants quiz - Nurturing a plant quiz - Concept review unit exam
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\*\*\*Each unit is valued at 20% of the total course mark. There is no final exam as it is an elementary course.