

## Is this your opportunity of a life time?



You overheard a group of people talking about designing and building an eco village in your home state. Ever since you have seen Al Gore's movie, "An Inconvenient Truth", you have wondered what you can do to help the environment. What a great opportunity this could be for you! Will you be able design the first eco friendly village in your home state? As you bring yourself into the conversation you learn that the village will house 100 community members, will incorporate energy efficient homes, minimize waste, have healthy living areas, and the board members are open to factoring in the design team's ideas. You must conduct research about land area and energy efficient ways which will be proper for such a community. Proposals are due to the board members in 7 days and presentations to the board members will be in 15 days. Proposals must include costs analysis spreadsheet, drawing to scale, PowerPoint presentation describing and selling your eco-village.

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## Rubric

	Novice	Apprentice	Practitioner	Expert
<b>Excel</b>	<ul style="list-style-type: none"> <li>▪ excel spreadsheet with titles</li> <li>▪ some expenses on graph</li> <li>▪ 1 itemized line is price compared</li> </ul>	<ul style="list-style-type: none"> <li>▪ excel spreadsheet with titles</li> <li>▪ all expenses shown</li> <li>▪ expenses are somewhat accurate</li> <li>▪ 1-3 itemized lines are compared</li> </ul>	<ul style="list-style-type: none"> <li>▪ excel spreadsheet with titles and graph</li> <li>▪ all expenses shown</li> <li>▪ expenses are accurate</li> <li>▪ more than 3 itemized lines are compared</li> </ul>	<p>all of <i>Practitioner</i> plus:</p> <ul style="list-style-type: none"> <li>• pricing sheets submitted</li> <li>• 2 advanced skills in excel are used</li> </ul>
<b>Drawing to Scale</b>	<ul style="list-style-type: none"> <li>▪ drawn on grid paper</li> <li>▪ buildings and dimensions are labeled</li> </ul>	<ul style="list-style-type: none"> <li>▪ drawn on grid paper</li> <li>▪ buildings and dimensions are labeled</li> <li>▪ calculations are somewhat accurate</li> </ul>	<ul style="list-style-type: none"> <li>▪ drawn on grid paper</li> <li>▪ buildings and dimensions are labeled</li> <li>▪ calculations with formulas are accurate</li> <li>▪ the drawing is neat and easy to read</li> </ul>	<p>all of <i>Practitioner</i> plus:</p> <ul style="list-style-type: none"> <li>▪ used multiple advanced geometric shapes <u>and</u> used the entire area.</li> <li>▪ accurately reflects dimensions of scale drawing, includes creative landscaping and furnishings.</li> </ul>

<p style="text-align: center;"><b>Content Science</b></p>	<ul style="list-style-type: none"> <li>▪ identified 1 way to save/reuse a natural resource</li> <li>▪ identified 1 way to save/reuse a waste production</li> <li>▪ 1 form of a reliable resource is cited</li> <li>▪ evidence that normal living can be attained</li> <li>▪ addressed at least 3 of the 7 Eco-Challenges in the Practitioner column</li> </ul>	<ul style="list-style-type: none"> <li>▪ identified 1 way to save/reuse a natural resource</li> <li>▪ identified 1 way to save/reuse a waste production</li> <li>▪ 2-3 forms of reliable resources are cited</li> <li>▪ addressed at least 5 of the 7 Eco-challenges in the Practitioner column</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identified 1 way to save/reuse a natural resource</li> <li>▪ Identified 1 way to save/reuse a waste production</li> <li>▪ description of costs</li> <li>▪ More than 3 forms of a reliable resource is cited</li> </ul> <p><b>ECO-CHALLENGES</b></p> <ul style="list-style-type: none"> <li>▪ preserved natural habitats on the village land</li> <li>▪ produced food, wood, and other bio-resources on site</li> <li>▪ process the organic waste produced on site</li> <li>▪ render harmless any initially toxic waste from the village</li> <li>▪ recycle solid waste from the village</li> <li>▪ process liquid waste from the village</li> <li>▪ avoid adverse environmental impacts off site from the production and delivery of any products brought in from off site</li> </ul>	<p>all of <i>Practitioner</i> plus:</p> <ul style="list-style-type: none"> <li>▪ identified and described energy efficient ways</li> <li>▪ persuasive content</li> </ul> <p><b>BUILDING CHALLENGES</b> (Choose min. of 2)</p> <ul style="list-style-type: none"> <li>▪ build with ecologically friendly materials</li> <li>▪ use renewable energy sources</li> <li>▪ handle solid, liquid, and gaseous wastes from buildings in an ecologically friendly manner</li> <li>▪ have a minimal need for motorized transport</li> <li>▪ build in ways that have a minimal impact on the land and the local ecology.</li> </ul>
<p><b>Content Math</b></p>	<ul style="list-style-type: none"> <li>▪ records and converts some or few of the measurements accurately</li> <li>▪ unable to create a classroom floor plan that is accurate.</li> </ul>	<ul style="list-style-type: none"> <li>▪ records and converts most of the measurements correctly</li> <li>▪ uses measurements to draw plan that is not entirely accurate.</li> </ul>	<ul style="list-style-type: none"> <li>▪ records and converts all of the measurements accurately</li> <li>▪ uses measurements to draw a plan to scale in precise detail.</li> </ul>	<p>All of Practitioner plus:</p> <ul style="list-style-type: none"> <li>▪ scale drawing is completed using CAD</li> </ul>

<p style="text-align: center;"><b>Multi-media Presentation</b></p>	<ul style="list-style-type: none"> <li>▪ explanation of design</li> <li>▪ scale drawing explanation</li> <li>▪ P6-8 slides</li> <li>▪ graphics on each slide</li> <li>▪ some members of team present</li> </ul>	<ul style="list-style-type: none"> <li>▪ explanation of design</li> <li>▪ scale drawing explanation</li> <li>▪ 8-10 slides</li> <li>▪ graphics on each slide</li> <li>▪ most members of team present</li> </ul>	<ul style="list-style-type: none"> <li>▪ explanation of design</li> <li>▪ scale drawing explanation</li> <li>▪ 8-10 slides</li> <li>▪ graphics on each slide, some animated</li> <li>▪ each member of the team presents</li> </ul>	<p>all of Practitioner plus:</p> <ul style="list-style-type: none"> <li>▪ Digital images of location, homes, etc.</li> <li>▪ Sound</li> <li>▪ Video clip</li> </ul>
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