

**Corrigé du sujet de l'examen de la 2ème année (toutes sections confondues)(29janvier2021)**

<b><u>DEVOIR DE FIN DE SEMESTRE N°1</u></b>		<b>20 mks</b>
<b>La tâche</b>		<b>Le barème</b>
<b><u>PART ONE READING COMPREHENSION:</u></b>		<b>25 mks</b>
<b>I</b>	<b>(c)Argumentative:</b> <i>use of dates/figures/cause-effect/arguing in favor of the topic/ stating the problems and providing solutions/ comparing and contrasting...</i>	<b>1.5 mks</b>
<b>II</b>	<b>2-</b> <i>Solar power station in space could be the answer to our future energy needs.</i>	<b>1mk</b>
<b>III</b>	<ol style="list-style-type: none"> <li><b>True:</b> <i>"Overcoming this challenge will require radical changes to how we <u>generate</u> and <u>consume</u> energy." (§2 L3/4).</i></li> <li><b>True:</b> <i>"But one major barrier to their uptake is the fact that they don't provide a constant supply of energy." (§2 L5/6).</i></li> <li><b>False:</b> <i>"A possible way around this would be to generate solar energy in space. There are many advantages to this." (§3 L1).</i></li> </ol>	3x1.5 = <b>4.5 mks</b>
<b>IV</b>	<b>The 2 benefits:</b> <ol style="list-style-type: none"> <li><i>"A space-based solar power station could orbit to face the Sun 24 hours a day." (§3 L2).</i></li> <li><i>"solar cells above the atmosphere will receive more sunlight and produce more energy." (§3 L3/4).</i></li> </ol>	2x1 = <b>2 mks</b>
<b>V</b>	<b>3 obstacles:</b> <ol style="list-style-type: none"> <li><i>"how to assemble... such large structure" (§3 L5).</i></li> <li><i>" how to launch... such large structure" (§3 L5).</i></li> <li><i>"how to deploy... such large structure" (§3 L5).</i></li> </ol> <b>Also accept:</b> <i>"Using lightweight material will also be critical" (§3 L7).</i>	3x1 = <b>3 mks</b>
<b>VI</b>	<b>3 possible alternatives:</b> <ol style="list-style-type: none"> <li><i>"to develop a swarm of thousands of smaller satellites that will come together and configure to form a single, large solar generator.." (§4 L1/2.)</i></li> <li><i>"California Institute of Technology outlined designs for a modular power station, consisting of thousands of ultralight solar cell tiles." (§4 L2/3)</i></li> <li><i>a prototype tile weighing just 280 grams per square metre, similar to the weight of card." (§4 L4/5).</i></li> </ol> <b>Also accept:</b> <i>"3D printing, are also being looked at for this application." (§5 L1/2).</i>	3x1 = <b>3 mks</b>

VII	We need electricity 24 hours a day/without interruption/ constantly/ all day and all night.					1mk																							
VIII	Step1.	Solar cells receive sunlight.				3x1 = 3mks																							
	Step2.	Convert electricity from the solar cells into energy waves. (§7 L1/2).																											
	Step3.	Use electromagnetic fields to transfer them down to an antenna on the Earth's surface. (§7 L2/3).																											
	Step4.	The antenna would then convert the waves back into electricity. (§7 L3).																											
XI	Vocabulary:  1. Drastically 2. Harnessing 3. Deploy.					3x1 = 3mks																							
X	Reference words:  1. making huge strides in turning the concept into reality. 2. to generate/generating solar energy in space. 3. researchers at the California Institute of Technology.					3x1 = 3mks																							
PART TWO: WRITING:						15mks																							
Task1	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>c</td><td>a</td><td>e</td><td>d</td><td>b</td></tr></table>					1	2	3	4	5	c	a	e	d	b	10x0.5 = 2.5mks													
1	2	3	4	5																									
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Task2	<table><tr><td colspan="2">Mistake</td><td colspan="2">Correction</td></tr><tr><td>1.</td><td>on</td><td>1.</td><td>in</td></tr><tr><td>2.</td><td>using</td><td>2.</td><td>used</td></tr><tr><td>3.</td><td>the</td><td>3.</td><td>The</td></tr><tr><td>4.</td><td>who</td><td>4.</td><td>which</td></tr><tr><td>5.</td><td>industry power</td><td>5.</td><td>power industry</td></tr></table>				Mistake		Correction		1.	on	1.	in	2.	using	2.	used	3.	the	3.	The	4.	who	4.	which	5.	industry power	5.	power industry	5x0.5 = 2.5mks
Mistake		Correction																											
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4.	who	4.	which																										
5.	industry power	5.	power industry																										
Task3	Writing:  Adherence to task and fluency (5 marks).  Language (grammar and vocabulary)( 2.5 marks).  Mechanics (spelling /punctuation/capitalisation) (2.5 marks).					10 mks																							