

# Water Treatment Rubric Name: \_\_\_\_\_

Your task is to investigate and research how a water treatment system works, before redesigning your own using different materials for filtration. You will be working in small groups for the investigation and research section and you will complete your experiment in these small groups as well. You will need to use your knowledge and understanding of water treatment facilities to construct a flow chart detailing the steps for water treatment, as well as evaporation, to show an understanding of the importance that evaporation has in the water treatment process. You will then work individually to create a multimodal presentation to present your finding. You will be completing a self-reflection and a peer review, and you will get a peer review from also in the class also.



ASSESSABLE ELEMENTS	DESCRIPTORS				
	A	B	C	D	E
	The student work demonstrates evidence of:				
<b>Knowledge and understanding</b> – Knowledge and understanding of process	Comprehensive knowledge and understanding of the process of the water treatment facility, how evaporation effects the process and the sequence of the process.	Thorough knowledge and understanding of the process of the water treatment facility, how evaporation effects the process and the sequence of the process.	Satisfactory knowledge and understanding of the process of the water treatment facility, how evaporation effects the process and the sequence of the process.	Limited knowledge and understanding of the process of the water treatment facility, how evaporation effects the process and the sequence of the process.	With support has knowledge and understanding of the process of the water treatment facility, how evaporation effects the process and the sequence of the process.
<b>Ideation –</b> Planning, investigation and designing	Discerning interpretation and analysis of the water treatment process with information and evidence to generate well-reasoned design ideas.	Logical interpretation and analysis of the water treatment process with information and evidence to generate convincing design ideas	Relevant interpretation and analysis of the water treatment process with information and evidence to generate credible design ideas	Limited interpretation and analysis of the water treatment process with information and evidence to generate design ideas	With support can interpretation and analysis of the water treatment process with information and evidence to generate design ideas

<b>Production – Making and Testing</b>	<p>Controlled and skilful implementation of production processes to design and make water treatment system.</p> <p>Tools and techniques are skilfully used to manipulate materials in the designing and constructions stages.</p> <p>Understands the need for safety and consistently applies safe practices.</p>	<p>Purposeful and effective implementation of production processes to design and make a water treatment system.</p> <p>Tools and techniques are effectively used to manipulate materials in the designing and constructions stages.</p> <p>Understands the need for safety and regularly applies safe practices.</p>	<p>Appropriate and credible implementation of production processes to design and make a water treatment system.</p> <p>Tools and techniques are adequately used to manipulate materials in the designing and constructions stages.</p> <p>Understands the need for safety and sometimes applies safe practices.</p>	<p>Variable implementation of production processes to design and make a water treatment system.</p> <p>Tools and techniques are used with significant assistance to manipulate materials in the designing and constructions stages.</p> <p>Understands the need for safety but application is inconsistent.</p>	<p>Minimal implementation of production processes to design and make a water treatment system.</p> <p>An attempt is made to use tools and techniques to manipulate materials in the designing and constructions stages.</p> <p>Understands the need for safety</p>
<b>Evaluation – Reflection and peer review</b>	<p>Perceptive evaluation of products and processes</p> <p>Perceptive reflection on the impact of technology and on their learning</p> <p>Perceptive peer review of water treatment system designs.</p>	<p>Informed evaluation of products and processes</p> <p>Informed reflection on the impact of technology and on their learning</p> <p>Informed peer review of water treatment system designs.</p>	<p>Relevant evaluation of products and processes</p> <p>Relevant reflection on the impact of technology and on their learning</p> <p>Relevant peer review of water treatment system designs.</p>	<p>Narrow evaluation of products and processes</p> <p>Superficial reflection on the impact of technology and on their learning</p> <p>Superficial peer review of water treatment system designs.</p>	<p>Incomplete evaluation of products and processes</p> <p>Incomplete reflection on the impact of technology and on their learning</p> <p>Incomplete peer review of water treatment system designs.</p>

Comments: \_\_\_\_\_

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**Guide to making judgments** Overall: **A** **B** **C** **D** **E**