



QUICK ENGINEERING CHALLENGE 2016

An Apple Flotation Device

• Student : _____

Evaluation

Elements for evaluation: discussions, teamwork, presentations, notebook, etc

Criteria	A	B	C <i>With help (teacher, team)</i>	D <i>Even with help</i>
Description of the problem	<ul style="list-style-type: none"> Expresses the purpose of the challenge in his/her own words. Formulates hypotheses related to the purpose and his/her personal knowledge. 	<ul style="list-style-type: none"> Recopies the purpose. Formulates hypotheses related to the purpose. 	<ul style="list-style-type: none"> Purpose is incomplete. Occasionally formulates hypotheses related to the purpose. 	<ul style="list-style-type: none"> Parts of purpose are missing or incorrect. Rarely formulates hypotheses.
	A+ A A ⁻	B+ B B ⁻	C+ C C ⁻	D+ D E
Approach	<ul style="list-style-type: none"> Suggests an appropriate experiment or design using what he/she has been taught in class. Performs the task, adapts when necessary, occasionally suggests new ideas about the task. 	<ul style="list-style-type: none"> Suggests an experiment or design using key information taught in class. Performs the task. 	<ul style="list-style-type: none"> Suggests an experiment or design using little of what he/she has been taught in class. Performs part of the task. 	<ul style="list-style-type: none"> Does not suggest an experiment or design. Does not perform the task.
	A+ A A ⁻	B+ B B ⁻	C+ C C ⁻	D+ D E
Use of instruments, tools and techniques	<ul style="list-style-type: none"> Uses objects, tools, instruments and techniques properly and safely. 		<ul style="list-style-type: none"> Sometimes does not use objects, tools, instruments or techniques properly and safely. 	<ul style="list-style-type: none"> Does not use objects, tools, instruments or techniques properly and safely.
	A+ A A ⁻ B+	B B ⁻	C+ C C ⁻	D+ D E
Use/mastery of scientific and technological knowledge	<ul style="list-style-type: none"> Gives clear, relevant explanations or solutions (well-developed arguments), using knowledge in a way that is appropriate for the situation. 	<ul style="list-style-type: none"> Offers relevant explanations or solutions (fewer or less developed arguments), using knowledge in a way that is ± appropriate for the situation. 	<ul style="list-style-type: none"> Offers few explanations or solutions. 	<ul style="list-style-type: none"> Does not offer any explanations or solutions.
	A+ A A ⁻	B+ B B ⁻	C+ C C ⁻	D+ D E