Main Criteria: Forward

Secondary Criteria: Common Core State Standards
Subjects: Mathematics, Science, Technology Education
Grades: 5, 6, 7, 8, Key Stage 2, Key Stage 3

Forward

Solar Water Disinfection (SODIS)

Common Core State Standards Mathematics

Grade 5 - Adopted: 2010

STRAND / DOMAIN		Mathematical Practices
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP6	Attend to precision.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP7	Look for and make use of structure.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP8	Look for and express regularity in repeated reasoning.
STRAND / DOMAIN		Measurement and Data
CATEGORY/ CLUSTER	CCSS.M ath.Cont ent.5.MD	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

STANDARD	CC22 M	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
STANDARD	CC33.IVI	measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ii, and improvised units.
	ath.Conte	
	nt.5.MD.C	
	.4	

STRAND / DOMAIN		Measurement and Data
CATEGORY / CLUSTER	CCSS.M ath.Cont ent.5.MD	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
STANDARD	CCSS.M ath.Cont ent.5.MD .C.5	Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
EXPECTATION	CCSS.M ath.Conte nt.5.MD.C. 5.a	Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
EXPECTATION	CCSS.M ath.Conte nt.5.MD.C. 5.b	Apply the formulas $V = I \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.

Common Core State Standards Mathematics

Grade 6 - Adopted: 2010

STRAND / DOMAIN		Mathematical Practices
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP7	Look for and make use of structure.

STRAND / DOMAIN		Geometry
CATEGORY I CLUSTER	CCSS.M ath.Cont ent.6.G.	Solve real-world and mathematical problems involving area, surface area, and volume.
STANDARD	CCSS.M ath.Conte nt.6.G.A.2	Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = I w h$ and $V = b h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

Common Core State Standards Mathematics

Grade 7 - Adopted: 2010

STRAND / DOMAIN		Mathematical Practices
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP7	Look for and make use of structure.

Common Core State Standards Mathematics

Grade 8 - Adopted: 2010

STRAND / DOMAIN		Mathematical Practices
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP2	Reason abstractly and quantitatively.

CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.M ath.Practi ce.MP7	Look for and make use of structure.
STRAND / DOMAIN		Geometry
CATEGORY / CLUSTER	CCSS.M ath.Cont ent.8.G. C	
STANDARD	CCSS.M ath.Conte nt.8.G.C.9	Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Common Core State Standards Science

Grade 6 - Adopted: 2010

STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY/ CLUSTER		Key Ideas and Details
STANDARD	CCSS.EL A- Literacy.R ST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
STANDARD	CCSS.EL A- Literacy.R ST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Craft and Structure

STANDARD CCSS EL A A A A A A A A A A A A A A A A A A A			
STRAND / CCS.EL Andrew Compare and Contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. STANDARD CCS.EL Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. STRAND / CCS.EL Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. STRAND / CCS.EL Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. STRAND / CCS.EL Compare and Contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. STRAND / CCS.EL Literacy, RST.6-8.3 STRAND / CCS.EL Literacy, wits 1.6-8 STRAND / CCS.EL Literacy wits 1.	STANDARD	A- Literacy.R	
CATEGORY/ CATEGORY/ CATEGORY/ CIUSTER STANDARD CCSS.EL A- Literacy, RST.6-8.9 CATEGORY/ CATEGORY/ CATEGORY/ CATEGORY/ CATEGORY/ CATEGORY/ CATEGORY/ CATEGORY/ CIUSTER Range of Reading and Level of Text Complexity CATEGORY/ Literacy, RST.6-8.1 CATEGORY/ CIUSTER Writing Standards for Literacy in Science and Technical Subjects A- Literacy, WHST.6-8 CATEGORY/ Production and Distribution of Writing CATEGORY/ Production and Distribution of Writing	STANDARD	A- Literacy.R	
STRAND / CCSS.EL Literacy. Range of Reading and Level of Text Complexity STRAND / DOMAIN STRAND / DOMAIN CCSS.EL A. Literacy. Reading Standards for Literacy in Science and Technical Subjects A. Literacy. Rational for Literacy in Science and Technical Subjects A. Literacy. Rational for Literacy in Science and Technical Subjects A. Literacy. Rational for Literacy in Science and Technical Subjects A. Literacy. Rational for Literacy in Science and Technical Subjects A. Literacy. Rational for Literacy in Science and Technical Subjects STRAND / DOMAIN CCSS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects CATEGORY / Literacy. Writing Standards for Literacy in Science and Technical Subjects STANDARD CCSS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects EXPECTATION CCS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects or technical processes. EXPECTATION CCS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects STRAND / D. CCS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects STRAND / D. CCS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects STRAND / D. CCS.EL La. Literacy. Writing Standards for Literacy in Science and Technical Subjects A. Literacy. Writing Standards for Literacy in Science and Technical Subjects A. Literacy. Writing Standards for Literacy in Science and Technical Subjects CATEGORY / Production and Distribution of Writing		A- Literacy.	Reading Standards for Literacy in Science and Technical Subjects
STRAND / CCSS.EL Literacy. RST6-8.0 STRAND / CCSS.EL Literacy. Range of Reading and Level of Text Complexity CATEGORY / CLUSTER STANDARD CCSS.EL A- Literacy. RST6-8.10 STRAND / CCSS.EL Literacy. RST6-8.10 STRAND / CCSS.EL LA- Literacy. WHST.6-8 STANDARD CATEGORY / CLUSTER Text Types and Purposes STANDARD CCSS.EL LA- Literacy. WHST.6-8 STANDARD CCSS.EL LA- LA- LITERACY.			Integration of Knowledge and Ideas
CATEGORY / CLUSTER STANDARD CCSS.EL A- Literacy.RST.6-8 CCCSS.EL A- Literacy.RST.6-8 STRAND / DOMAIN CCSS.EL A- Literacy.WHST.6-8 CATEGORY / CLUSTER Text Types and Purposes CATEGORY / CLUSTER STANDARD CCSS.EL LA- Literacy.WHST.6-8 CATEGORY / CLUSTER STANDARD CCSS.EL LA- Literacy.WHST.6-8 CCSS.EL Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes. EXPECTATION CCSS.EL Use precise language and domain-specific vocabulary to inform about or explain the topic. A- Literacy.WHST.6-8 CCSS.EL Writing Standards for Literacy in Science and Technical Subjects A- Literacy.WHST.6-8 CCSS.EL A- Literacy.WHST.6-8 CATEGORY/ Production and Distribution of Writing	STANDARD	A- Literacy.R	
STANDARD CCSS.EL A- Literacy. Writing Standards for Literacy in Science and Technical Subjects CATEGORY / CLUSTER STANDARD CCSS.EL LA- Literacy. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. EXPECTATION CCSS.EL LA- Literacy. WHST.6-8.8.2.d Writing Standards for Literacy in Science and Technical Subjects A- Literacy. WHST.6-8.8.2.d Writing Standards for Literacy in Science and Technical Subjects and Standards for Literacy in Science and Technical Subjects A- Literacy. WHST.6-8.2.d STRAND / DOMAIN CCSS.EL Literacy. Writing Standards for Literacy in Science and Technical Subjects A- Literacy. WHST.6-8.2.d Production and Distribution of Writing		A- Literacy.	Reading Standards for Literacy in Science and Technical Subjects
A- Literacy.R ST.6-8.10 STRAND / CCSS.EL DOMAIN A- Literacy.WHST.6-8 CATEGORY / CLUSTER STANDARD CCSS.EL LA- Literacy.WHST.6-8 EXPECTATION CCSS.EL A- Literacy.WHST.6-8 EXPECTATION EXPECTATION CCSS.EL A- Literacy.WHST.6-8 EXPECTATION CCSS.EL A- Literacy.WHST.6-8 EXPECTATION EXPECTATION EXPECTATION CCSS.EL A- Literacy.WHST.6-8 EXPECTATION EXPECTATIO			Range of Reading and Level of Text Complexity
CATEGORY/ CLUSTER Text Types and Purposes CCSS.E LA- Literacy. WHST.6-8 EXPECTATION CCSS.EL A- Literacy.W HST.6- 8.2 Use precise language and domain-specific vocabulary to inform about or explain the topic. A- Literacy.W HST.6- 8.2.d STRAND / DOMAIN CCSS.EL A- Literacy.W HST.6- 8.2.d Writing Standards for Literacy in Science and Technical Subjects CATEGORY / Production and Distribution of Writing	STANDARD	A- Literacy.R	
STANDARD CCSS.E LA- Literacy. WHST.6- 8.2 EXPECTATION CCSS.EL Literacy.W HST.6- 8.2. Use precise language and domain-specific vocabulary to inform about or explain the topic. A- Literacy.W HST.6- 8.2.d STRAND / DOMAIN CCSS.EL A- Literacy. Writing Standards for Literacy in Science and Technical Subjects CATEGORY / Production and Distribution of Writing		A- Literacy.	
EXPECTATION CCSS.EL Use precise language and domain-specific vocabulary to inform about or explain the topic. A- Literacy.W HST.6- 8.2.d STRAND / DOMAIN CCSS.EL A- Literacy.W HST.6- 8.2.d CCSS.EL A- Literacy.W HST.6- 8.2.d Production and Distribution of Writing			Text Types and Purposes
A- Literacy.W HST.6- 8.2.d STRAND / CCSS.EL A- Literacy. WHST.6-8 CATEGORY / Production and Distribution of Writing	STANDARD	LA- Literacy. WHST.6-	experiments, or technical processes.
DOMAIN A- Literacy. WHST.6-8 CATEGORY / Production and Distribution of Writing	EXPECTATION	A- Literacy.W HST.6-	
		A- Literacy.	
			Production and Distribution of Writing

STANDARD	CCSS.EL A- Literacy. WHST.6- 8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
STANDARD	CCSS.EL A- Literacy. WHST.6- 8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

Common Core State Standards Science

Grade 7 - Adopted: 2010

		Grade 7 - Adopted: 2010
STRAND <i>I</i> DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Key Ideas and Details
STANDARD	CCSS.EL A- Literacy.R ST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
STANDARD	CCSS.EL A- Literacy.R ST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Craft and Structure
STANDARD	CCSS.EL A- Literacy.R ST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
STANDARD	CCSS.EL A- Literacy.R ST.6-8.5	Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.
STRAND <i>I</i> DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Integration of Knowledge and Ideas

STANDARD	CCSS.EL A- Literacy.R ST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
STRAND <i>I</i> DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Range of Reading and Level of Text Complexity
STANDARD	CCSS.EL A- Literacy.R ST.6-8.10	By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.
STRAND / DOMAIN	CCSS.EL A- Literacy. WHST.6-8	Writing Standards for Literacy in Science and Technical Subjects
CATEGORY I CLUSTER		Text Types and Purposes
STANDARD	CCSS.E LA- Literacy. WHST.6- 8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
EXPECTATION	CCSS.EL A- Literacy.W HST.6- 8.2.d	Use precise language and domain-specific vocabulary to inform about or explain the topic.
STRAND / DOMAIN	CCSS.EL A- Literacy. WHST.6-8	Writing Standards for Literacy in Science and Technical Subjects
CATEGORY/ CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.EL A- Literacy. WHST.6- 8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
STANDARD	CCSS.EL A- Literacy. WHST.6- 8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Key Ideas and Details
STANDARD	CCSS.EL A- Literacy.R ST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
STANDARD	CCSS.EL A- Literacy.R ST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Craft and Structure
STANDARD	CCSS.EL A- Literacy.R ST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
STANDARD	CCSS.EL A- Literacy.R ST.6-8.5	Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.
STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	CCSS.EL A- Literacy.R ST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
STRAND / DOMAIN	CCSS.EL A- Literacy. RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Range of Reading and Level of Text Complexity
STANDARD	CCSS.EL A- Literacy.R ST.6-8.10	By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.

STRAND / DOMAIN	CCSS.EL A- Literacy. WHST.6-8	Writing Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	CCSS.E LA- Literacy. WHST.6- 8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

EXPECTATION

CCSS.EL Use precise language and domain-specific vocabulary to inform about or explain the topic.

A-

Literacy.W

HST.6-

8.2.d

STRAND <i>I</i> DOMAIN	CCSS.EL A- Literacy. WHST.6-8	Writing Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Production and Distribution of Writing
STANDARD	CCSS.EL A- Literacy. WHST.6- 8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
STANDARD	CCSS.EL A- Literacy. WHST.6- 8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.