Forward

Solar Water Disinfection (SODIS)

Common Core State Standards
Mathematics
Grade **5** - Adopted: **2010**

STRAND / DOMAIN		Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP6	Attend to precision.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP7	Look for and make use of structure.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP8	Look for and express regularity in repeated reasoning.

STRAND / DOMAIN		Measurement and Data
CATEGORY / CLUSTER	**CCSS.Math.Content.5.MD.C**	**Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.**

STANDARD	CCSS.Math.Content.5.MD.C.4	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

STRAND / DOMAIN		Measurement and Data
CATEGORY / CLUSTER	CCSS.Math.Content.5.MD.C	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
STANDARD	CCSS.Math.Content.5.MD.C.5	Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

EXPECTATION	CCSS.Math.Content.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.Math.Content.5.MD.C.5.b	Apply the formulas $V = l \times w \times h$ 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.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP7	Look for and make use of structure.

STRAND / DOMAIN		Geometry
CATEGORY / CLUSTER	CCSS.Math.Content.6.G.A	Solve real-world and mathematical problems involving area, surface area, and volume.
STANDARD	CCSS.Math.Content.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 = l 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.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP7	Look for and make use of structure.

Common Core State Standards
Mathematics
Grade **8** - Adopted: **2010**

STRAND / DOMAIN		Mathematical Practices
CATEGORY / CLUSTER	CCSS.Math.Practice.MP1	Make sense of problems and persevere in solving them.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.

CATEGORY / CLUSTER	CCSS.Math.Practice.MP3	Construct viable arguments and critique the reasoning of others.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP4	Model with mathematics.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP5	Use appropriate tools strategically.
CATEGORY / CLUSTER	CCSS.Math.Practice.MP7	Look for and make use of structure.

STRAND / DOMAIN		Geometry
CATEGORY / CLUSTER	CCSS.Math.Content.8.G.C	Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.
STANDARD	CCSS.Math.Content.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.ELA-Literacy.RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Key Ideas and Details
STANDARD	CCSS.ELA-Literacy.RST.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.ELA-Literacy.RST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

STRAND / DOMAIN	CCSS.ELA-Literacy.RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Craft and Structure

STANDARD	CCSS.ELA-Literacy.RST.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.ELA-Literacy.RST.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.ELA-Literacy.RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Integration of Knowledge and Ideas
STANDARD	CCSS.ELA-Literacy.RST.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.ELA-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.ELA-Literacy.RST.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.ELA-Literacy.WHST.6-8	Writing Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Text Types and Purposes
STANDARD	CCSS.ELA-Literacy.WHST.6-8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
EXPECTATION	CCSS.ELA-Literacy.WHST.6-8.2.d	Use precise language and domain-specific vocabulary to inform about or explain the topic.

STRAND / DOMAIN	CCSS.ELA-Literacy.WHST.6-8	Writing Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Production and Distribution of Writing

STANDARD	CCSS.ELA-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.ELA-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**

STRAND / DOMAIN	CCSS.ELA-Literacy.RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Key Ideas and Details
STANDARD	CCSS.ELA-Literacy.RST.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.ELA-Literacy.RST.6-8.3	Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

STRAND / DOMAIN	CCSS.ELA-Literacy.RST.6-8	Reading Standards for Literacy in Science and Technical Subjects
CATEGORY / CLUSTER		Craft and Structure
STANDARD	CCSS.ELA-Literacy.RST.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.
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