



RENEWABLE ENERGY & ENGINEERING

STANDARD ALIGNMENTS

Common Core Math & ELA

SL.4.1

Engage effectively in a range of collaborative discussions with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly

SL.4.3

Identify the reasons and evidence a speaker provides to support particular points

4.OA.A.1

Interpret a multiplication equation as a comparison, e.g., interpret $35=5\times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiple equations

4.OA.A.2

Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

4.OA.A.3

Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

4.NBT.B.4

Fluently add and subtract multi-digit whole numbers using the standard algorithm.

Next Generation Science Standards

4-PS3-1

Use evidence to construct an explanation relating the speed of an object to the energy of that object.

4-PS3-4

Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.

3-5 ETS1-3

Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

3-5-ETS1-1

Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

Massachusetts Comprehensive Health Curriculum

3.7.CE.1

Analyze the relationship between personal health and the health of the community.

3.7.CE.6

Use accurate information when discussing environmental health issues (e.g., littering, deforestation, recycling, climate change, clean water) that impact people's health.