

SCIENCE CURRICULUM MEETINGS

August 7 and 8, 2013

Meeting Notes

Reviewed Science Curriculum document from Fall 2010. The SIE Kit for the Human Body is now used in grade 5, while the SIE Kit on Environments is used in grade 4.

A review of data indicated that grade 8 science scores are an area of weakness. This led to a review of anchors for the Grade 8 Science PSSA and when they are taught. The results are as follows:

S8.A.1 Reasoning and Analysis

All three (A.1.1 – A.1.3) are to be taught by all teachers.

S8.A.2 Processes, Procedures, and Tools of Scientific Investigations

All five are to be taught by all teachers.

NOTE: The above anchors represent Inquiry and 50% of the tests.

S8.B.1 Structure and Function of Organisms

S8.B.1.1 Grades 5 and 6

S8.B.2 Continuity of Life

All will be taught in grade 7.

S8.C.1 Structure, Properties, and Interaction of Matter and Energy

S8.C.1.1 Grade 8

S8.C.2 Forms, Sources, Conversion, and Transfer of Energy—Needs to be reviewed by grade 6

S8.C.2.1 Grade 8

S8.C.2.1 Grade 7

S8.C.3.1 Possibly Grade 6 with Grade 8 doing S8.C.3.1.3 after PSSA

S8.D.1 Earth Features and Processes that Change Earth and Its Resources

S8.D.1.1 Grade 7

S8.D.1.2 Grade 7

S8.D.1.3 Variety of Grades

S8.D.1.3.1 Grade 5 and 7 with Erosion, Geography—same chart

Grade 8—Acid Rain

S8.D.1.3.2 Grade 8 Chemistry

S8.D.1.3.3 Grade 7 Geography

S8.D.1.3.4 Grade 7

S8.D.2 Weather, Climate, and Atmospheric Processes
Taught in Grade 5

S8.D.3 Composition and Structure of the Universe
Taught in Grade 5

Meetings:

There needs to be a meeting with Science, grade 6, and Social Studies, grades 5 and 7, to determine units taught and to seek assistance in topics from social studies.

Science needs to meet with English and Social Studies to discuss requirements for papers.

An articulation meeting of all science teachers, K – 12, is needed.

There needs to be a meeting of teachers of Biology, Health, and General Science to determine topics for the Keystone exams. Liz and Sherry were able to meet, but there needs to be a meeting with the Health teachers.

There needs to be a meeting with math teachers to determine when/how equation solving is taught, as well as unit conversions (Dimensional Analysis).

NEEDS:

Posters need to be made of the Scientific Method which uses consistent terms. It will not be difficult to explain to students in different grades that these include the same concepts as their books—just different terms.

Observe, Gather Data, Hypothesize, Experiment, Conclude

Decisions need to be made on textbooks—Techbooks and Flexbooks are under consideration.

Grade 7 computer class needs to include a project for Algebra I and Grade 8 Science (Page 2 of Anchors) in which students need to complete a graph and evaluate it. This is to reinforce Scientific Method and also prepare students to be able to draw, analyze, and find the equation of Lines of Best Fit.

OTHER:

Easy Bib and project directions can be videotaped and made available to all students. QR codes could easily be used to post these.