

MS SCHOOL CIA MONDAY Oct 20

*3 ds pages of handout, 1 ds 9<sup>th</sup>/10<sup>th</sup>, 3 ds of kid talk 1 per table, 1 pink sign in*

Announcements:

Welcome to science teaching!

Science is the key to the future

Hand in: Teacher Info Forms, Syllabus/outline (or send later)

New Teachers:

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Books/Materials: Funded from school, please report NEEDED missing materials ASAP. The key is to form a cooperative relationship with administration.

***Rich agrees to coordinate "extras" with needs.***

Late Sep: need people to help with materials donated by Bayer, other items

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Supervisor: 08-09: increased role working with Cambridge, supervising priority schools. District improvement plan now includes science, both in scheduling and in achievement goals. Focus of science supervision will be on new teachers.

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Some PD:

Oct 21 Yale Science Teacher reception, Oct 25 CT Science Teacher Conference, , BioBus, Other?

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Science Fair: Cathy vanDyke (CoopChem last year), now mentor supervisor, important dates coming up

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Nov. 4 Full day PD for 7-12 teachers. Will send out a note calling for presenters, many went to summer/outside training that they can share with others. Plan is for 3-4 hours of "sign up" 1 hr sessions. Location Sound School

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sciencedebate2008.com, if you want to involve science and the election.

CAPT/CMT results:

Posted on Schoolnet, use your own class lists from this year or last year to drill down to specific results.

CMT Results grade 8:

	Physical/17	Earth/17	Life/17	Content/30	Inquiry/21
<b>New Haven</b>	<b>50%</b>	<b>48%</b>	<b>48%</b>	<b>50%</b>	<b>47%</b>

SCIENCE 8	SCIENCE 8	SCIENCE 8	8th	
	% Goal Range	% Proficient	ACHIEVEMENT GAPS in % PROFICIENCY (WHITE-AVG MINORITY)	
New London	16.8	29.9	24.2	
Hartford	17	32.3	38.3	
Bridgeport	18	37.1	23.8	
New Britain	21.6	42.3	29.1	
Waterbury	22	42.7	31.3	
Windham	22.4	39.2	34	
Bloomfield	23.1	50.3	-	
<b>New Haven</b>	<b>25.2</b>	<b>45.4</b>	<b>34.8</b>	

District plan 8<sup>th</sup> CMT % Prof to 65% by 2011, 10<sup>th</sup> CAPT % Prof to 72%, with gaps of < 10%

TEST STRANDS	%														
	5th	5th	5th	5th	5th	5th	5th		8th	8th	8th	8th	8th	8th	8th
Group	Physical	Earth	Life	Content	Inquiry	GOAL%	PROF%		GOAL%	PROF%	Physical	Earth	Life	Content	Inquiry
State	65%	62%	69%	63%	70%	55.2	81.1	State	58.9	75.2	65%	62%	63%	65%	61%
New Haven	<b>50%</b>	<b>49%</b>	<b>54%</b>	<b>48%</b>	<b>54%</b>	21.3	53.8	New Haven	25.2	45.4	50%	48%	48%	50%	47%
Barnard Env	46%	46%	52%	46%	51%	14.9	46.8	Barnard Env Magnet	-	-					
Beecher Sch	47%	44%	46%	44%	48%	16.7	40.9	Beecher Sch	-	-					
Jepson	58%	53%	60%	54%	61%	26.5	70.6	Benjamin Jepson	15.6	44.4	46%	45%	46%	45%	46%
Betsy Ross Arts	57%	56%	60%	55%	62%	34.8	73.0	Betsy Ross Arts	40.2	70.1	59%	55%	58%	56%	59%
Bishop Woods	53%	50%	57%	50%	58%	27.3	60.6	Bishop Woods Sch	-	-					
Celentano Sch	43%	45%	47%	43%	49%	11.4	34.3	Celentano Sch	25.0	47.7	47%	51%	50%	50%	49%
Clemente	41%	42%	49%	42%	47%	5.7	34.3	Clemente Leadership	10.0	28.9	45%	41%	39%	45%	37%
Clinton Avenue	46%	41%	45%	41%	47%	4.8	35.5	Clinton Avenue Sch	-	-					
Columbus	49%	47%	48%	45%	52%	6.1	48.5	Columbus Family Acad	-	-					
Conte West Hills	53%	54%	59%	52%	60%	25.4	64.2	Conte West Hills	40.5	62.2	56%	53%	56%	55%	55%
Davis	56%	54%	56%	51%	61%	20.0	72.0	Davis 21st Century	-	-					
East Rock	44%	49%	56%	45%	56%	14.0	52.6	East Rock Global	16.7	33.3	43%	46%	48%	46%	44%
Edgewood Sch	66%	59%	69%	62%	68%	49.0	83.7	Edgewood Sch	45.7	78.3	66%	58%	58%	58%	65%
Fair Haven	43%	45%	48%	43%	48%	4.3	38.3	Fair Haven	17.9	40.2	49%	46%	42%	47%	43%
Hill Central	34%	38%	48%	39%	41%	13.0	32.6	Hill Central Music	2.5	15.0	36%	39%	42%	40%	39%
John C Daniels	55%	57%	60%	53%	63%	23.1	80.8	John C Daniels	-	-					
John S Martinez	47%	46%	59%	49%	53%	16.2	47.3	John S Martinez Sch	16.7	33.3	48%	41%	43%	46%	41%
Kath Brennan	39%	36%	41%	35%	43%	2.9	28.6	Katherine Brennan	0.0	14.7	36%	34%	34%	39%	29%
King Robinson	49%	46%	51%	47%	51%	13.5	51.4	King Robinson Magnet	40.9	63.6	61%	52%	55%	55%	58%
Lincoln Bassett	45%	46%	45%	44%	47%	19.4	41.7	Lincoln Bassett Sch	13.5	29.7	43%	42%	41%	45%	38%
Microsociety	53%	52%	55%	50%	57%	21.1	63.2	Microsociety Magnet	14.3	42.9	51%	46%	50%	50%	47%
Nathan Hale Sch	56%	53%	61%	54%	61%	21.2	69.2	Nathan Hale Sch	53.7	74.1	62%	61%	64%	62%	62%
Ross Woodward	44%	44%	47%	43%	47%	9.7	37.5	Ross Woodward Sch	12.7	28.2	43%	41%	38%	43%	38%
Sheridan	61%	57%	71%	60%	67%	45.8	75.0	Sheridan Commun MS	42.4	58.8	56%	55%	57%	58%	54%
Troup Magnet	53%	49%	52%	48%	56%	17.2	55.2	Troup Magnet	33.3	51.0	55%	51%	52%	51%	54%
Truman Sch	44%	41%	46%	42%	47%	11.9	32.2	Truman Sch	17.3	38.7	48%	45%	46%	48%	44%
Urban Youth Ctr						-	-	Urban Youth Ctr MS	0.0	0.0	27%	29%	26%	32%	21%
Vincent E Mauro	66%	69%	69%	68%	67%	59.6	83.0	Vincent E Mauro	-	-					
Wexler Grant	54%	53%	61%	53%	61%	35.0	65.0	Wexler Grant	16.3	32.7	45%	42%	43%	44%	42%
WorthHooker	68%	65%	70%	63%	74%	62.5	80.0	Worthington Hooker	69.7	87.9	69%	67%	68%	69%	66%

Assessments: Revisions, suggestions WERE due by Oct 1 via email

Quarter One:

Oct 20 Grade 7/8 Tests and Scantrons distributed at CIA

Oct 27 Grade 9-12 Tests and Scantrons distributed at CIA/mailed

Oct 30-Nov 10 Tests given (end of quarter Nov 14)

Nov 17 Scantrons back at Supervisor

Nov 19 Scantrons to data center

Quarter Two:

Jan 12 Grade 7/8 Tests and Scantrons distributed at CIA

Grade 9-12 Tests and Scantrons distributed via mail

Jan 21-Jan 30 Tests given (end of quarter Jan 30)

Feb 6 Scantrons back at Supervisor

Feb 10 Scantrons to data center

Quarter Three:

Mar 16 Grade 7/8 Tests and Scantrons distributed at CIA

Mar 23 Grade 9-12 Tests and Scantrons distributed at CIA

Mar 30-Apr 7 Tests given (end of quarter Apr 9)

Apr 15 Scantrons back at Supervisor

Apr 17 Scantrons to data center

Quarter Four:

June 1 Grade 7-12 Tests and Scantrons distributed mail

June 8-18 Tests given (end of quarter June 25)

June 29 Scantrons back at Supervisor

June 30 Scantrons to data center

Intro to PD topics for the year: Science Conversations and Science Learning: what research shows.

## 7<sup>th</sup> Grade Pacing Guide

### UNIT 1: PROPERTIES OF MATTER

C0. Describe matter and its properties.

C1. Describe the properties of common elements such as oxygen, hydrogen, carbon, iron, and aluminum.

CINQ1. Identify questions that can be answered through scientific investigation.

CINQ5. Use appropriate tools and techniques to make observations and gather data.

CINQ6. Use mathematical operations to analyze and interpret data.

### DISTRICT EMBEDDED TASK: STAYING AFLOAT

### UNIT 2: CHEMICAL PROPERTIES

C 2. Describe how the properties of simple compounds, such as water and table salt, are different from the properties of the elements of which they are made.

C 3. Explain how mixtures can be separated by using the properties of the substances from which they are made, such as particle size, density, solubility and boiling point.

Q1 Assessment

### UNIT 3: CELLS

C 15. Describe the basic structures of an animal cell, including nucleus, cytoplasm, mitochondria and cell membrane, and how they function to support life.

C 25. Explain the similarities and differences in cell division in somatic and germ cells.

### UNIT 4: GENETICS/REPRODUCTION

C 26. Describe the structure and function of the male and female human reproductive systems, including the process of egg and sperm production.

C 27. Describe how genetic information is organized in genes on chromosomes, and explain sex determination in humans

Q2 Assessment

### UNIT 5: LIFE SYSTEMS: MUSCULO-SKELETAL

C 17. Explain how the human musculo-skeletal system supports the body and allows movement.

Q3 Assessment

### UNIT 6: LIFE SYSTEMS: BIOCHEMICAL

C 16. Describe the structures of the human digestive, respiratory and circulatory systems, and explain how they function to bring oxygen and nutrients to the cells and expel waste materials.

ET: CMT Task Heartbeat

### UNIT 7 MICROBES/FOOD PRESERVATION

C 21. Describe how freezing, dehydration, pickling and irradiation prevent food spoilage caused by microbes

ET: Food Preservation Project

. Q4 Assessment

## 8<sup>th</sup> Grade Outline

### UNIT 1: STATIC FORCES/BRIDGES

CINQ5 Use appropriate tools and techniques to make observations and gather data.

CINQ6 Use mathematical operations to analyze and interpret data.

C. 23 Describe the qualitative relationships among force, mass

C. 30 Explain how beam, truss and suspension bridges are designed to withstand the forces that act on them

ST: STRONG BRIDGES

Q1 Assessment

### UNIT 2 MOTION

C 22. Calculate the average speed of a moving object and illustrate the motion of objects in graphs of distance over time.

C 23. Describe the qualitative relationships among force, mass and changes in motion.

C 24. Describe the forces acting on an object moving in a circular path

ST: REQUIRED EMBEDDED CMT TASK: SHIPPING/SLIDING

### UNIT 3 PLANETARY MOTION/PHASES/SEASONS/ECLIPSES

C 28. Explain the effect of gravity on the orbital movement of planets in the solar system.

C 29. Explain how the regular motion and relative position of the sun, Earth and moon affect the seasons, phases of the moon and eclipses.

Q 2 Assessment

### UNIT 4 LANDFORMS & CONSTRUCTIVE/DESTRUCTIVE EARTH FORCES

C 18. Describe how folded and faulted rock layers provide evidence of the gradual up and down motion of the Earth's crust.

C 19. Explain how glaciation, weathering and erosion create and shape valleys and floodplains.

### UNIT 5 TECTONIC PLATES

C 20. Explain how the boundaries of tectonic plates can be inferred from the location of earthquakes and volcanoes.

CMT TEST 1<sup>st</sup> Week of March

Q3 Assessment

### UNIT 6 ROCK CYCLE

D.21 Explain how internal energy of the Earth causes matter to cycle through the magma and the solid earth.

### UNIT 7 NATURAL DISASTERS

8.f.3 National Standard

Intro Video:

8<sup>th</sup> Grade class, given instruction on igneous, metamorphic, sedimentary rocks. Some practice with “science talks” (how rocks are formed). Rules for science talks include to be a good listener, but teacher admits that often just meant be silent till you can talk/question.

Task: Day one, discuss with groups, Day two: build model of rock cycle  
Teacher is helping a more organized group in classroom, this group is in the hallway.

2 min in: What suggestions should she give the group?

What do you think about how she intervened?

7 minutes in: What do you think of the students’ summary/progress?

11 min in: What about her explanation with shoe?

After this video:

Do you think that science talks could help you as a teacher figure out students’ learning?

How can you structure science talks?

Also:

Examine the pacing guide for the year to see if there are any issues/changes.

See what other data you need from CMT/CAPT.