Assignment: “Heart Rate Formula and Personalized Exercise Chart”

Need:
“Heart rate Chart/Poster” with “Heart rate Zones Poster” on the back (Either print one for each student or print as posters for your gym that students can refer to.)
“My Healthy Heart Zone Personalized Exercise Chart Worksheet” (Print one for each student.)
Calculators

Here is what the “Heart rate Chart or Poster” with “Heart rate Zones Poster” on the back is:

This lesson is part of my “Common Core Standards for P.E. Made Easy: 20 Activities to Align Your Program” at:

And it’s also part of my “Best P.E. Curriculum” at:

Directions:

1. Have students use the “Heart rate Chart/Poster“ to see their own target heart rates and zones for their age. This is a simplified formula that has you subtract your age from 220. If you want a more “technical” formula that involves your resting heart rate, you can use the Karvonen method at this website, but I found the less math you have the students do the better, and we just use the chart with 220 minus your age! Also, the chart rounds the target so you can count for 6 seconds and add a zero!

http://www.wikihow.com/Calculate-Your-Target-Heart-Rate
2. Next explain to students that there are different zones you can work out in and it depends on how fast your heart rate is. This chart shows the zones, but it doesn't tell the specific heart rate numbers, so that is what you'll help your students do next.

Next have students fill in the “My Healthy Heart Zone Personalized Exercise Chart Worksheet” using their own age and the numbers from the “Heart rate Chart/Poster”. See the example below and maybe even print some examples for students to see.
3. Now that students have their target zones, have them take their heart rate periodically during your P.E. activities have them count their pulse for 6 seconds, add a zero and look at this sheet or one of the heart rate posters included in this curriculum to see if they are in their target zone. If they’re under their zone, they need to work out harder!

Here are some of the documents used in this lesson, but they are all in the folder for easy printing.
My Healthy Heart Zone:

Decreases body fat, blood pressure and cholesterol. 85% of calories burned in this zone are fats!

My Fitness Zone:

Same benefits as healthy heart zone, but more intense and burns more total calories. Percent of fat calories is still 85%.

My Aerobic Zone:

Will improve your cardiovascular and respiratory system AND increase the size and strength of your heart. This is the preferred zone if you are training for an endurance event. More calories are burned with 50% from fat.

My Anaerobic Zone:

Improved VO2 max (highest amount of oxygen one can consume during exercise) so improved cardiorespiratory system, higher lactate tolerance ability, endurance will improve, and you'll fight fatigue better. This is a high intensity zone, it burns 15% calories from fat.

http://www.thewalkingsite.com/thr.html
### My Healthy Heart Zone:

- **Decreases body fat, blood pressure and cholesterol.** 85% of calories burned in this zone are fats!

<table>
<thead>
<tr>
<th>Zone</th>
<th>Calories Burned</th>
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<td>50%</td>
<td>100-120</td>
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### My Fitness Zone:

- **Same benefits as healthy heart zone, but more intense and burns more total calories.** Percent of fat calories is still 85%.

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<td>120-140</td>
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### My Aerobic Zone:

- **Will improve your cardiovascular and respiratory system AND increase the size and strength of your heart.** This is the preferred zone if you are training for an endurance event. More calories are burned with 50% from fat.

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### My Anaerobic Zone:

- **Improved VO2 max (highest amount of oxygen one can consume during exercise) so improved cardiorespiratory system, higher lactate tolerance ability, endurance will improve, and you'll fight fatigue better.** This is a high intensity zone, it burns 15% calories from fat.

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<td>160-180</td>
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[http://www.thewalkingsite.com/thr.html](http://www.thewalkingsite.com/thr.html)
Common Core State Standards
(http://www.corestandards.org)

Writing Standards for Literacy
in History/Social Studies, Science, and Technical Subjects
(Grades 9-10)

1. Write arguments focused on discipline-specific content.

2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.

3. Incorporate narrative elements effectively into arguments and informative/ explanatory texts.
   Note: Students’ narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results.

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically.

7. Conduct short as well as more sustained research projects to answer a question (including a self generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

9. Draw evidence from informational texts to support analysis, reflection, and research.

10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
1. Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.

2. Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

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 9–10 texts and topics.

5. Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).

6. Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.

7. Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

8. Assess the extent to which the reasoning and evidence in a text support the author’s claim or a recommendation for solving a scientific or technical problem.

9. Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.

10. By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.
“The Best Health Curriculum” - A Complete 90-Day Semester of Health Lessons
You’ll love this complete curriculum! Each lesson has step-by-step teacher directions that go along with a daily PowerPoint. It’s 772 pages of teacher directions with documents and there are over 1800 total PowerPoint slides!) Check it out at:


“The Best Health Curriculum” - Re-formatted in a Sequential 3-Grade Level Program NEW!!!
This is the same curriculum as my best-selling Health curriculum; only it’s been meticulously reformatted into three 45-day curriculums.

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You have never seen a program like this one! This unique program has 30 introspective surveys and 60 follow up assignments on relevant issues for teens today. It's completely independent learning for your students-no textbook is needed, no videos are needed, students need no Internet or computer!


Homeschool Health Curriculum
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http://www.teacherspayteachers.com/Product/Nutrition-Unit-3-Weeks-of-Daily-Plans-190-Slide-PwrPt-Directions-

SEX ED. UNIT: 3 WEEK UNIT
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P.E.:
http://www.teacherspayteachers.com/Product/Common-Core-Standards-for-PE-Made-Easy-20-Activities-to-Align-Your-Program

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Nutrition Unit Lessons: http://www.teacherspayteachers.com/Store/Mrs-S

FREE! NUTRITION FORMULAS: HOW MANY CALORIES, FAT, AND SUGAR GRAMS SHOULD YOU HAVE?

IS THIS DIET HEALTHY? ANALYZING DIETS LESSON

FAST FOOD LESSON-HEALTHY VERSUS UNHEALTH POWERPOINT AND POSTER PROJECT

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CALCIUM LESSON FOR TEENS

**Sex Ed. Unit Lessons:** [http://www.teacherspayteachers.com/Store/Mrs-S](http://www.teacherspayteachers.com/Store/Mrs-S)

HEALTHY RELATIONSHIPS: WHAT DO THEY LOOK LIKE?

SEX ED. PRESSURE LINES LESSON: A POWERPOINT AND ASSERTIVE REFUSAL

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QUIT SMOKING BROCHURES LESSON: POWERPOINT WITH 8-PAGE RESEARCH

HOW POT HURT ME CARD GAME

DRUG FREE BINGO!

INTERVENTION: USING INTERVENTION T.V. SHOW FOR A HEALTH CLASS LESSON

NARCOTICS LESSONS AND PHARM PARTY ACTIVITY

ALCOHOL FACTS “SORRY” BOARD GAME:

ALCOHOL REFUSAL ROLE-PLAYS

HOW ALCOHOL AFFECTS THE BODY LESSON AND ART ACTIVITY

**Stress Unit, Self-Esteem and Other Lessons:** [http://www.teacherspayteachers.com/Store/Mrs-S](http://www.teacherspayteachers.com/Store/Mrs-S)

Stress-free BINGO!-Engaging Way to Review Stress, Depression, Suicide

STOP BULLYING LESSONS: A Powerful 4-Week Empathy/Violence Unit

IMPROVING SELF-ESTEEM UNIT: POWERPOINT AND 7 ACTIVITIES