

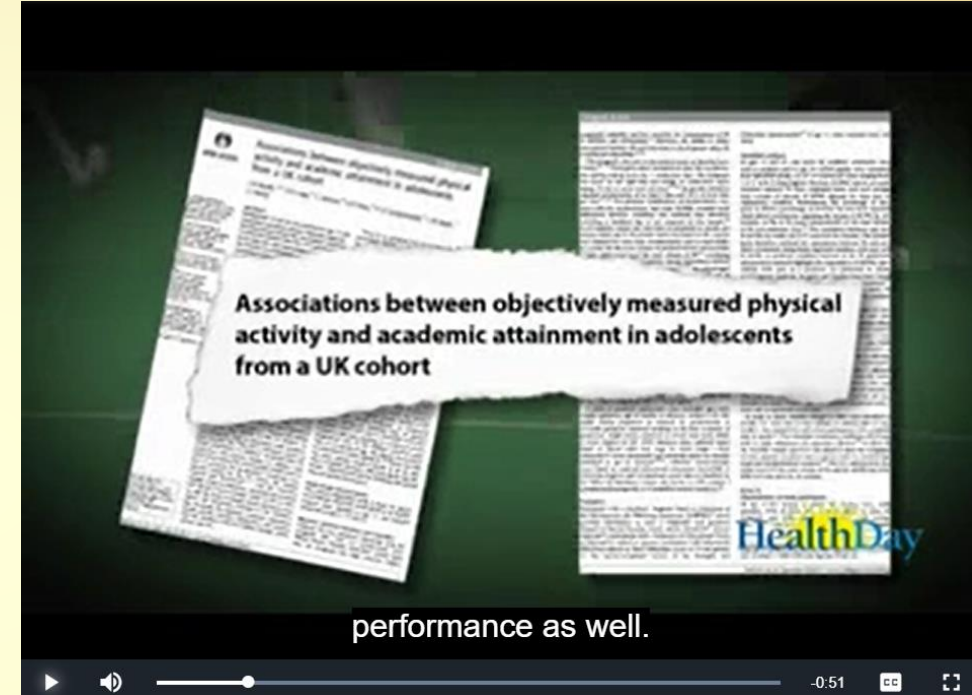
Sound Body, Sound Mind

1. Question & Research Task

We know that the foods we put in our bodies can impact our health in both a positive and negative way.

Athletes typically alter their diets to optimize their performance and now brain researchers have learned that what you eat can affect how you think and learn.

Now, medical researchers have found that there is a direct correlation between exercise and brain function.



Click the image above to view a segment about the connection between academic performance and physical education.

Image Source: [Gale In Context High School](#)

In this Slam Dunk, you will conduct brief, focused research to respond to the inquiry question:

How does your physical activity correlate to academic performance and brain function?

2. Information Sources

Choose several of the information sources* linked here to complete the Student Activity on Slide 3.

- [**Youth Physical Activity: The Role of Schools**](#): a report from the Centers for Disease Control (CDC)
- [**Physical Exercise Beefs up the Brain**](#): an article from Brain Facts
- [**Physical Fitness and Brain Health**](#): Video from the New York Times
- [**More PE in School**](#): an article from ABC News
- [**Regular Exercise Improves Memory**](#): an article from Harvard Medical School.
- [**This is your Brain on Exercise**](#): an article from Experience Life
- [**The PE Advantage**](#): article from State Legislatures
- [**Physical Education Reform in Public School**](#)- Ted Talk
- [**Strong evidence of link between physical activity and academic success**](#): article from Health Science



Select the image above to watch a video segment about how the human brain responds to exercise.

Image Source: [Discovery Ed](#)

***You may need to authenticate or login to databases; by follow directions on BCPS Digital Content page in the [Apps Portal](#).**

3. Student Activity

Use the resources on slide 2 to gather evidence that supports the importance of physical activity during the school day.

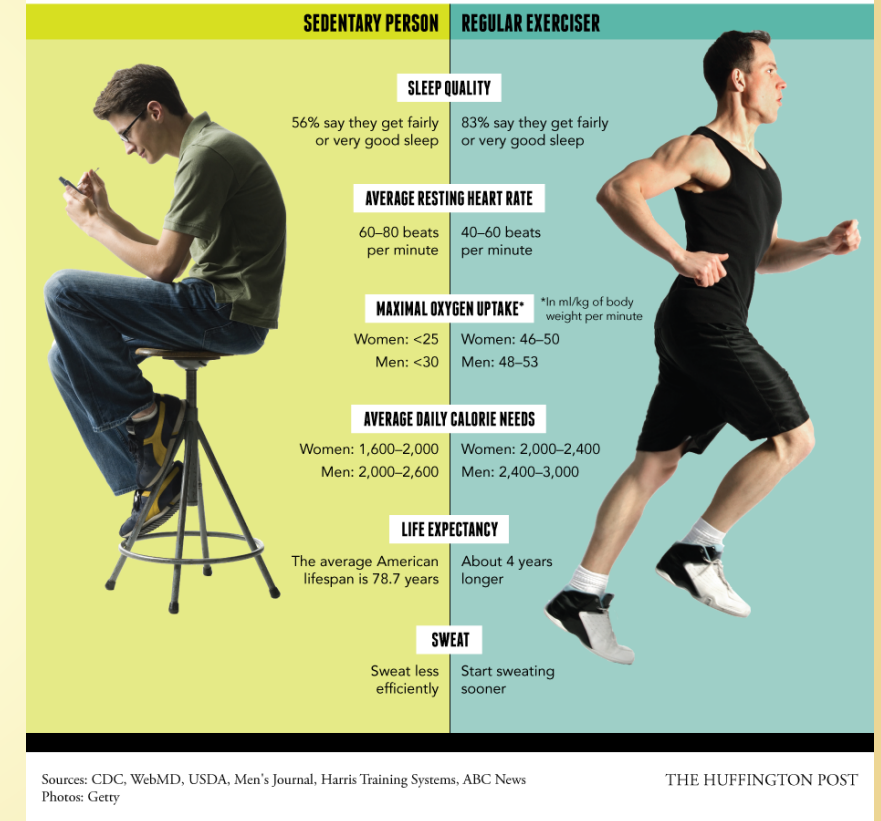
Download this digital [Cornell Notes Sheet](#) to collect your evidence. Don't forget to cite your sources.

If you prefer a printed Cornell Notes Sheet, ask your teacher to provide one.

At the end of this Slam Dunk lesson, you will try to persuade the administration of your school to promote more opportunities for physical activity during the school day by writing a persuasive letter.

THE DIFFERENCE **EXERCISE** MAKES

Only about 20 percent of American adults meet their recommended amount of exercise, but skipping on regular sweat sessions has some pretty profound effects. Here are a few of the major differences between an average, 40-year-old exerciser and someone getting little to no physical activity.



Select the image above to view a larger infographic about the benefits of exercise on the human body.

Image Source: Huffington Post

4. Assessment Activity

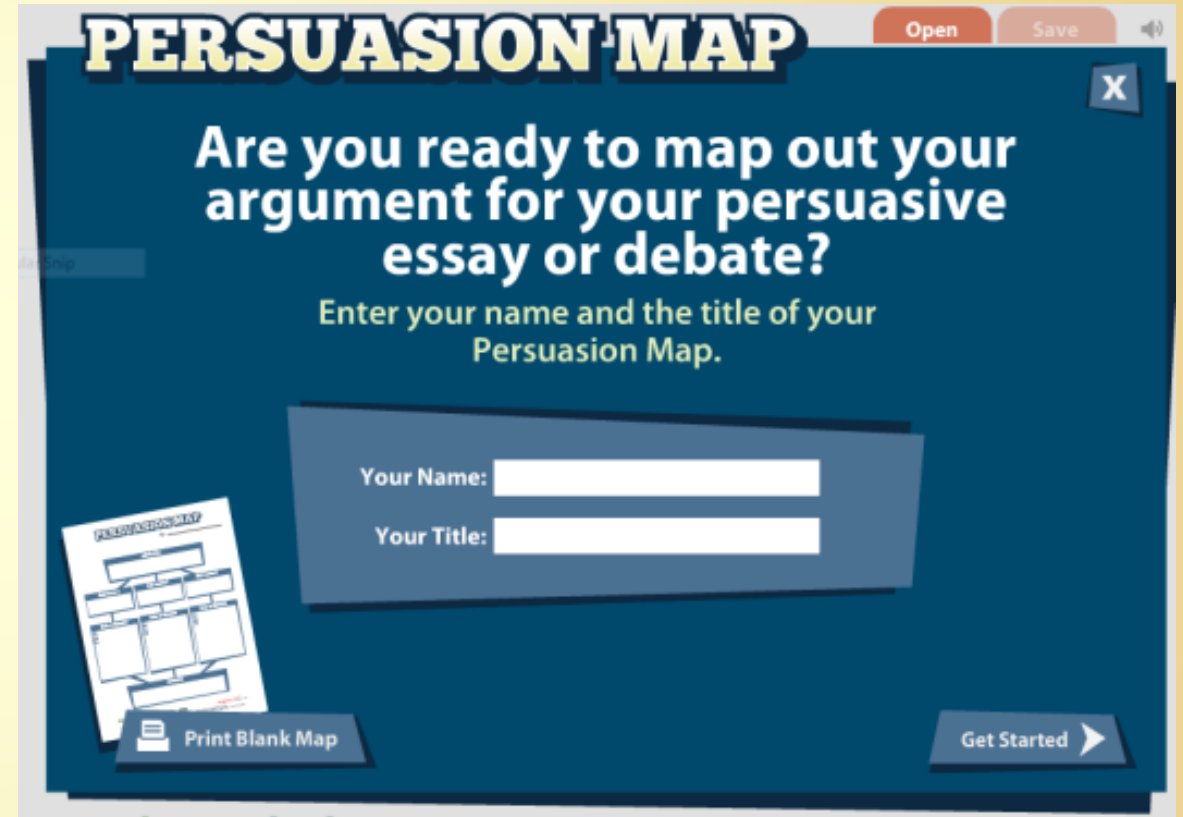
How does your physical activity correlate to academic performance and brain function?

Use the Persuasion Map on the right (online or print version) to lay out your arguments and reasons. Support your argument with evidence you gathered from the information sources on Slide 2 to lend credibility to your presentation.

Write a persuasive letter to the administration to promote more physical education opportunities during the school day. Use the reasons, arguments and facts from your map.

Use this rubric to guide and assess your work:

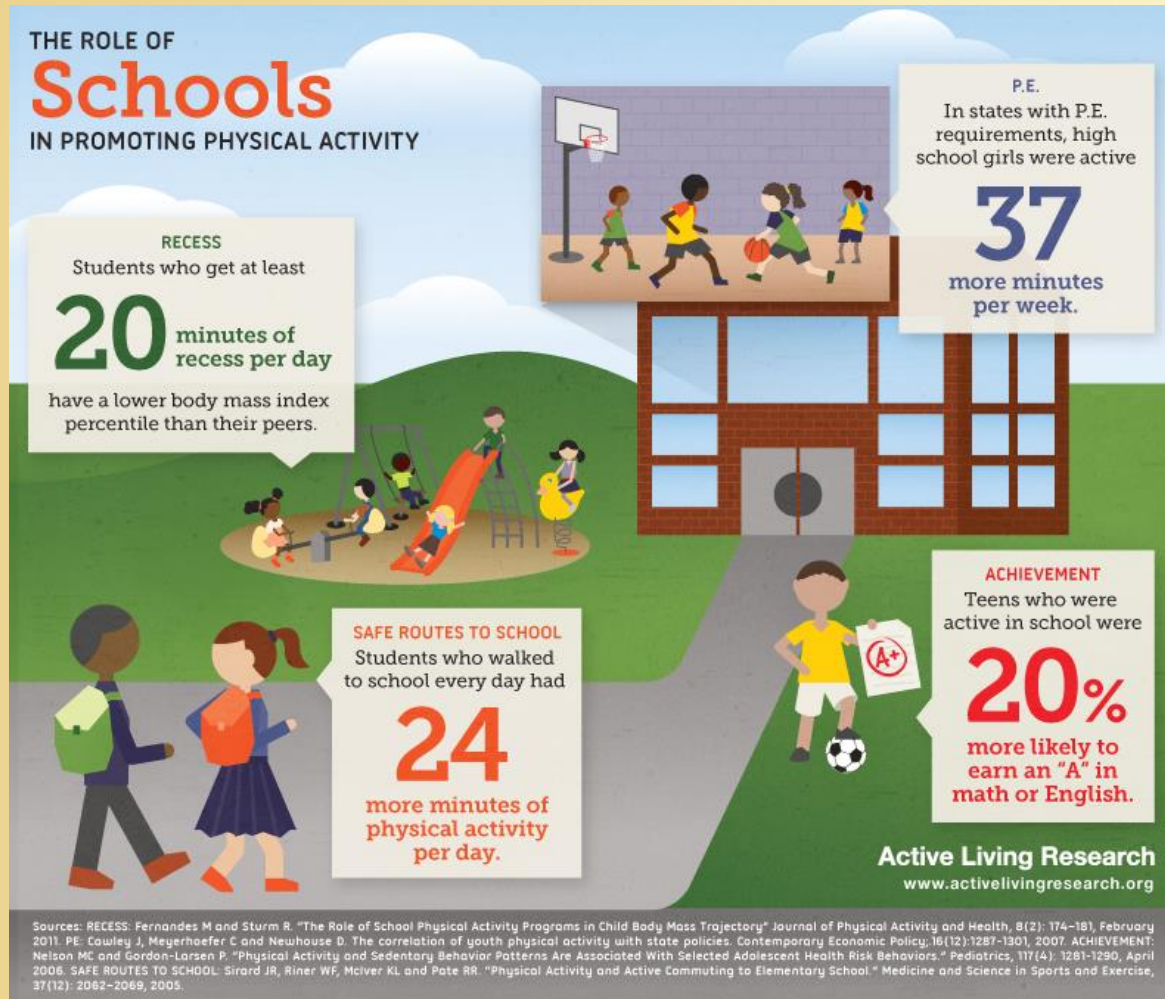
[Grading Rubric](#)

The image shows a digital interface for a 'PERSUASION MAP'. At the top, there's a title 'PERSUASION MAP' in large, bold, yellow letters with a blue outline. Below the title, a question asks 'Are you ready to map out your argument for your persuasive essay or debate?'. Underneath this, it says 'Enter your name and the title of your Persuasion Map.' There are two input fields: 'Your Name:' and 'Your Title:'. To the left of these fields is a small thumbnail image of a printed version of the map. At the bottom left, there's a button labeled 'Print Blank Map' with a printer icon. At the bottom right, there's a button labeled 'Get Started' with a right-pointing arrow. In the top right corner, there are 'Open' and 'Save' buttons, and a small 'X' icon in a blue square.

Select the image above to use a digital persuasion map that will help you outline your persuasive essay.

Image Source: [ReadWriteThink](#)

5. Enrichment Activities



Create an infographic to support your persuasive letter.

Use the information from your Cornell Notes and your Persuasion Map.

Here are some digital tools that you could use:

- Google Slides (You can use this [template](#) for assistance)

You could also create a non-digital infographic with drawing paper and coloring materials.

The infographic above provides statistical information about the benefits of physical activity during the school day.

Image Source: Active Living Research

6. Teacher Resources

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
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Learning Standards Alignment

Maryland State Curriculum/Content Standards

Physical Education Curriculum:

Standard 3: Demonstrates the knowledge and skills to achieve to a health-enhancing level of physical activity and fitness.

S3.H8 Fitness Knowledge

S3.H8.L1 Relates physiological responses to individual levels of fitness and nutritional balance.

Common Core State Standards for English Language Arts & Literacy

Reading: 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Writing: 7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

AASL Standards Framework for Learners Inquire: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.

Think: Learners display curiosity and initiative by:

I.A.2 Recalling prior and background knowledge as context for new meaning.

Create: Learners engage with new knowledge by following a process that includes:

I.B.1 Using evidence to investigate questions. I.B.3 Generating products that illustrate learning.

Share: Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

I.C.1 Interacting with content presented by others.

Grow: Learners participate in an ongoing inquiry-based process by:

I.D.2 Engaging in sustained inquiry.

P21 Framework: 21st Century Student Outcomes

3. Information, Media & Technology Skills: Information Literacy: Access information efficiently and effectively; Use information accurately and creatively for the issue or problem at hand.

ICT Literacy: Use technology as a tool to research, organize, evaluate and communicate information.

High School Health & Physical Education

Objective: Students will be conduct brief, focused research in order to understand the relationship between physical activity and brain function by writing a persuasive letter to their administration to promote more physical activity opportunities throughout the school day.

Time Frame: 1 90 minute class period

Differentiation strategies for this lesson:

- Have students use learning supports provided in BCPS Digital Content in the [Apps Portal](#).
- Refer to [Digital Content Snapshot/Support pages](#) as needed.

Notes to the teacher:

- Collaborate with your school library media specialist to plan and implement this lesson.
- Consider [using the Schoology Assignment Apps feature](#) to assign Microsoft and Google documents and files for students to access, edit, and submit through Schoology Teacher should preview all links for content.