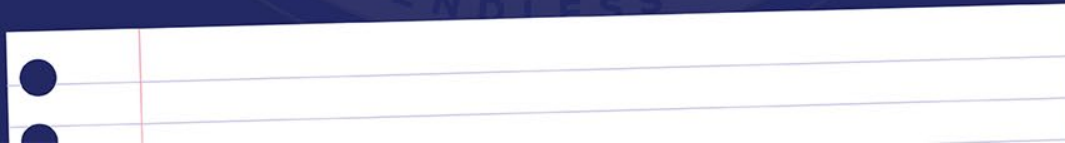


CLAY COUNTY DISTRICT SCHOOLS

Penda Learning

Science Resource Information

February 27, 2024



Clay County Science Scores

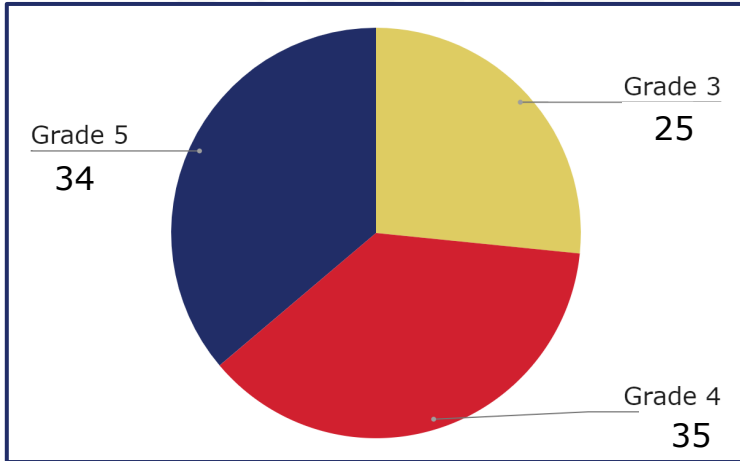
	Average Scale Score	State Average	State Ranking
Grade 5 SSA (3rd-5th Grade Benchmarks)	206	199	#6
Grade 8 SSA (6th-8th Grade Benchmarks)	205	198	#5
Biology EOC	411	403	#7
Overall			#4



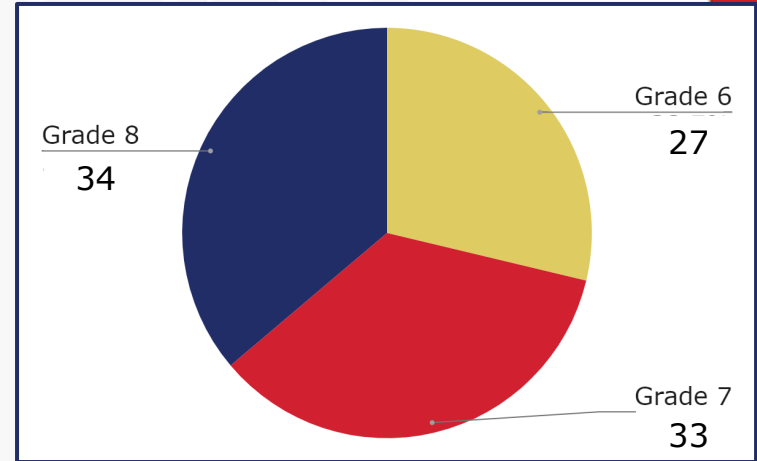
State Science Benchmarks



5th Grade SSA - 94 Benchmarks



8th Grade SSA - 94 Benchmarks



Biology
54 Total Benchmarks
22 Benchmark Groupings

Science Instructional Model



5E Lesson Planning Elementary Toolbox

UNIT	DATES	BENCHMARK(S)	LEARNING TARGETS

EE, MTR or SEP	Nature of Science

**Times may vary depending on the number of standards and student needs!*

ENGAGE	EXPLORE	EXPLAIN	ELABORATE	EVALUATE
How will you "hook" your students into this topic? How will you activate their prior knowledge and identify misconceptions?	How will students discover the key concepts of this lesson? What should they be able to explain to you at the end? What nature of science skills are students using?	How will students explain their understanding of the topics based on their investigation? How will you determine who has mastered the content and who is struggling?	What do struggling students need to master the benchmark ? What would help the students that are almost proficient understand the benchmark? How will you extend the knowledge of students that have already demonstrated mastery?	You are assessing students throughout this 5E cycle- but how will you determine mastery of the content? What summative assessment would allow you to determine if you are ready to move on to the next topic or if additional remediation is required?
EST TIME: ½ Day*	EST TIME: 1-2 Days*	EST TIME: 1-2 Days*	EST TIME: 1 Day*	EST TIME: 1 Day*
ACTIVITY/RESOURCES	ACTIVITY/RESOURCES	ACTIVITY/RESOURCES	ACTIVITY/RESOURCES	ACTIVITY/RESOURCES
<ul style="list-style-type: none"> Teacher Demonstration Engaging video clip Misconception question/probe = (Uncovering Student Ideas by Page Keely) What's in the Box (with item related to the unit) Practice Problem(s) Essential Question 	<ul style="list-style-type: none"> HMH Inquiry Labs CPALMS Labs Computer simulations/digital labs Field experiences Virtual Field Trips Phet Labs (also available in Penda) 	<ul style="list-style-type: none"> HMH Textbook Floridastudents.org Tutorials with notes HMH Virtual Lessons with notes CER Prompts Revisiting Essential Questions Interactive/MetaNotes Penda Whole-group Lesson 	<p>Developing Teacher Led Small Group Penda Developing Penda Review</p> <p>Achieving Penda Achieving Penda Review Small group lab I-SSA Review Workbook Anchor Charts/Gallery Walk</p> <p>Exceeding Penda Exceeding Anchor Charts/Gallery Walk Enrichment Research</p>	<ul style="list-style-type: none"> Common Assessments from PLC work HMH Assessments Teacher Created Assessments Revisiting Essential Questions Penda Assessments

What Penda is...

- Supplemental resource
- Support for small groups
- Support for ESE and ELL students
- Quick Checks for Understanding

What Penda is not...

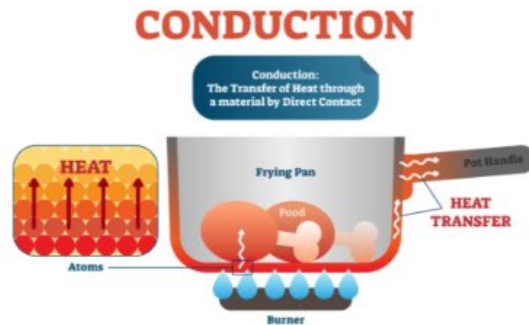
- Independent computer instruction
- Full class lesson plan
- Daily lesson plan

Learn It!

We feel thermal energy as heat. Heat flows between objects. It flows from hot to cold.

Conduction is the transfer of heat energy through direct contact.


Cooking food in a pan is an example of heat being conducted. Heat energy from the hot pan transfers into the cold food.



What is Penda?

Benchmark Instruction at 3 Reading Levels

5 Question Mini Assessments for Each Benchmark

0%	1. Speed (Developing) Requires Mastery (80% or better score)	 110 XP 55	RESUME
0%	2. Speed (Achieving) Requires Mastery (80% or better score)		START
0%	3. Speed (Exceeding)		START
0%	4. FL SC.4.P.12.2 Mini Assessment Requires Mastery (80% or better score)		START

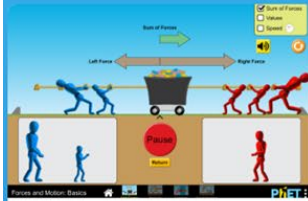


What is Penda?

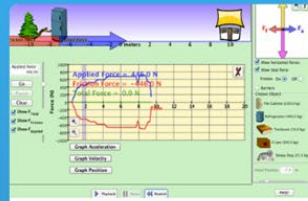
Access to Digital Lab Simulations

PhET Interactive Simulations

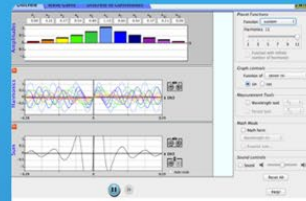
Penda Science has partnered with PhET Interactive Simulations, at the University of Colorado Boulder. To learn more about PhET and the future of our partnership, please review our [PhET Interactive Simulations support page](#).



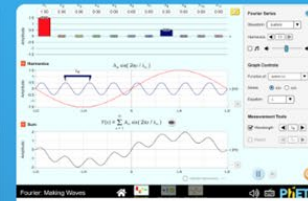
Forces And Motion: Basics



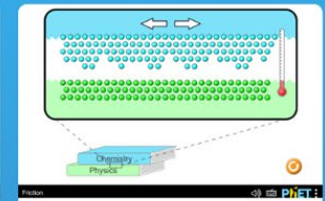
Forces In 1 Dimension



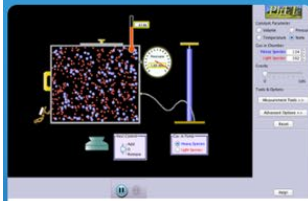
Fourier: Making Waves



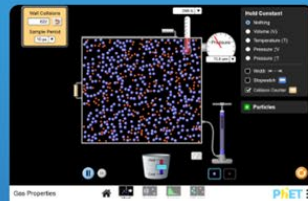
Fourier: Making Waves



Friction



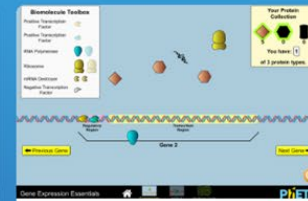
Gas Properties



Gas Properties



Gases Intro



Gene Expression Essentials



Gene Machine: The Lac Operon



What is Penda? Immersive Reader Options

Heat Conduction (Developing)

Screen 1 / 12

Objective:

Identify common materials that conduct heat well or poorly.

You will have learned this lesson if you can:

1. Identify common materials that conduct heat well.
2. Identify common materials that conduct heat poorly.



Vocabulary:

To understand this lesson, you need to know these words:

1. Conductor - material that allows heat to move through it
2. Insulator - material that limits the amount of heat that passes through

Speaker icon | ! icon | NEXT

Warmegeleiding (ontwikkelen) Original | Dutch

AA icon | List icon | Book icon

Objectief:

Identificeer veelgebruikte materialen die warmte goed of slecht geleiden.

Play icon | Settings icon



What is Penda?

Ability to Assign Activities to Class, Small Group, or Individual Student

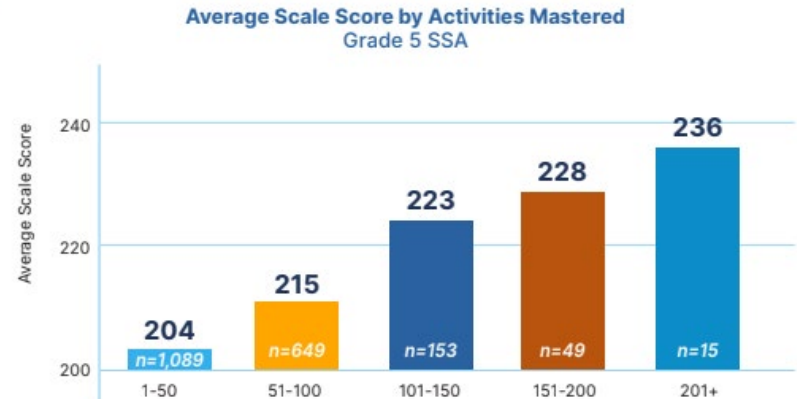
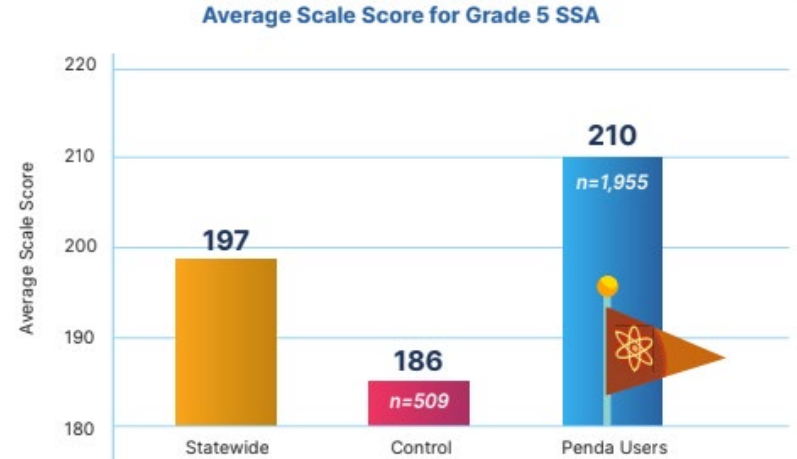
GROUPS

NAME	STUDENTS	TEACHERS	GRADE LEVEL	AUTHOR	TYPE	STATUS	ACTIONS
Early Finisher	1	1	FL Middle School + Assessments	Campbell, Robin	Class Level	Active	VIEW
Make Up 1	8	1	FL Middle School + Assessments	Campbell, Robin	Teacher Level	Active	VIEW
Make Up 2	7	1	FL Middle School + Assessments	Campbell, Robin	Teacher Level	Active	VIEW
Make Up Work	1	1	FL Middle School + Assessments	Campbell, Robin	Teacher Level	Active	VIEW



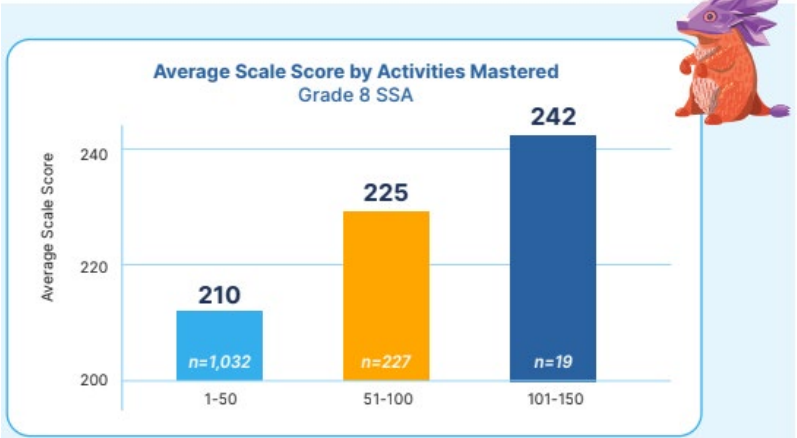
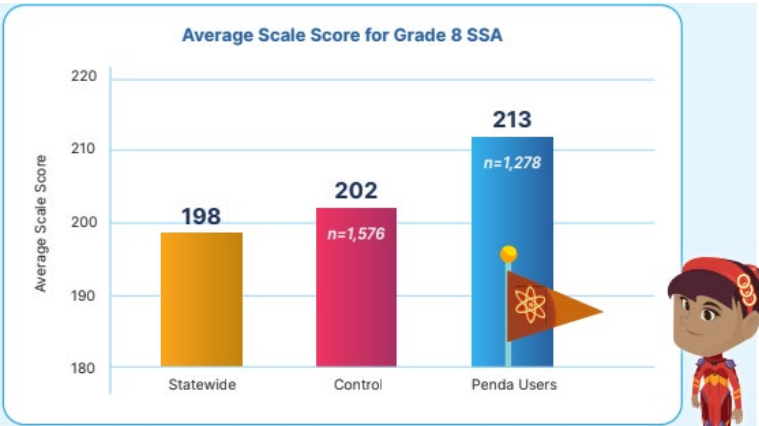
Clay & Penda's Success Story

- District recommendation for usage:
 - Complete 2-3 activities per week
 - Reach 80% mastery on each activity
 - Have a written component - note taking strategy evident
- 200 = Level 3
- 215 = Level 4
- 225 = Level 5



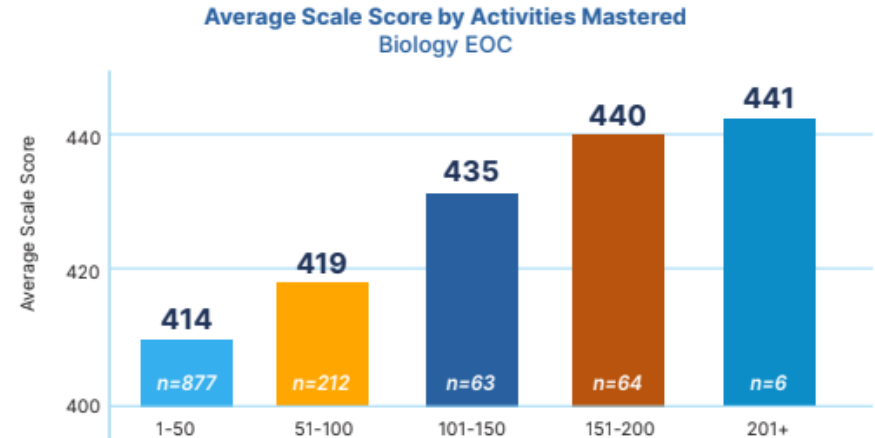
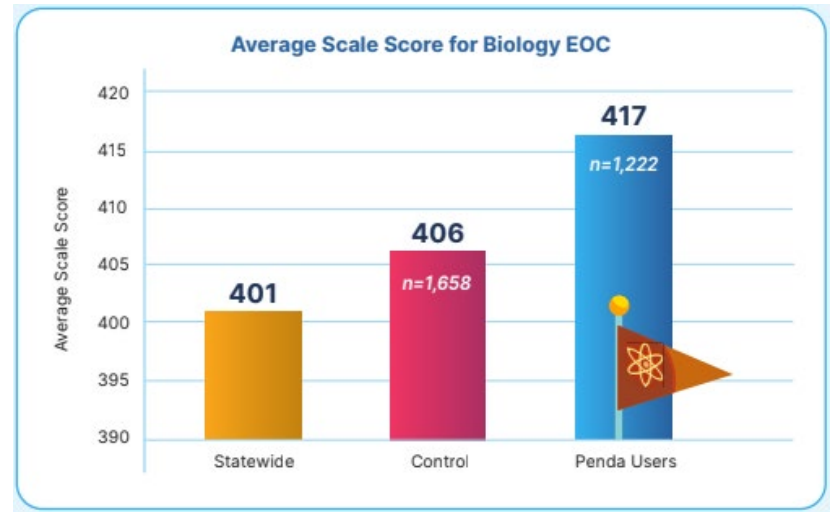
Clay & Penda's Success Story

- 203 = Level 3
- 215 = Level 4
- 225 = Level 5



Clay & Penda's Success Story

- 395 = Level 3
- 421 = Level 4
- 431 = Level 5



Penda Usage in Clay in 2023-2024

Product	Total Active Students	Average Minutes per Week	Average Score
Elementary	7515	16 minutes	86%
Junior High	6763	11 minutes	87%
High School	5236	8 minutes	86%
Totals	19502	12 minutes	86%



Penda Usage by Grade in 2023-2024

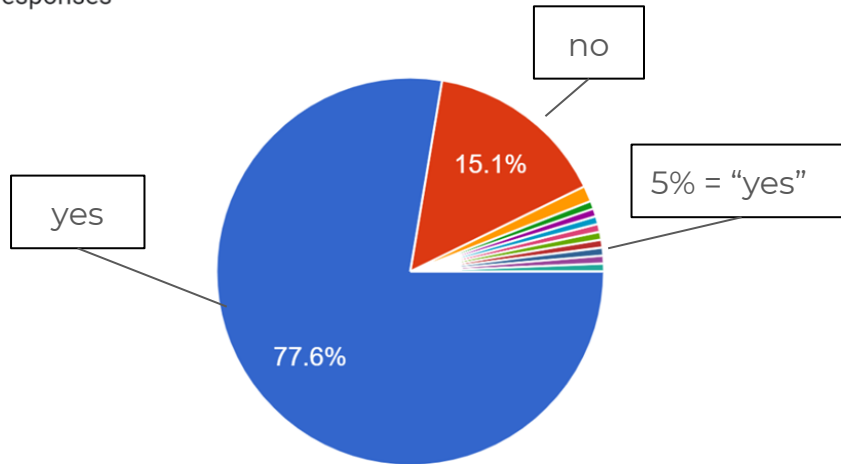
Product	Total Active Students	Average Minutes per Week
3rd Grade	2369	9 minutes
4th Grade	2561	13 minutes
5th Grade	2663	24 minutes
6th Grade	2637	12 minutes
7th Grade	2755	9 minutes
8th Grade	2553	10 minutes
9th Grade	2347	9 minutes
10th Grade	1414	8 minutes



Penda Teacher Feedback Survey

Do you feel that Penda provides a necessary support for science instruction beyond what the textbook offers?

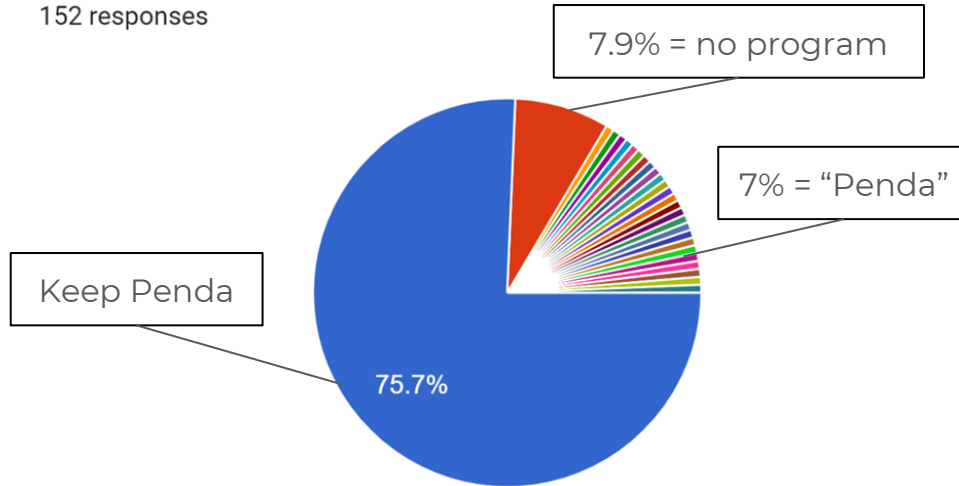
152 responses



Penda Teacher Feedback Survey

What is your recommendation for a supplemental science program for the 2024-2025 school year?

152 responses



The background features a repeating watermark of the Clay County Schools logo. The logo is circular and contains the text "CLAY COUNTY SCHOOLS" at the top, "IN GOD WE TRUST" at the bottom, and "DISCOVERING ENDLESS POSSIBILITIES" in a banner across the middle. A central torch is also visible within the logo.

Questions?
