



CURRICULUM UPDATE: Middle School Science

03.12.20

AGENDA

Rationale

Timeline

Committee

Resource

Professional Learning (PL)

Cost

Impact

Rationale

Science and Technology Concepts Middle School (STCMS) will engage students in authentic science, technology, engineering, and math (STEM) experiences through hands-on learning, science notebooking, and a deep dive into content.



Timeline

Fall: Committee gathered & began to review resource materials

2018

2018

Spring: STCMS Carolina Biological piloted

2019

- **Fall:** Pearson piloted
- **Winter:** Committee selected STCMS

2020

Spring: STCMS professional development



Committee

- All middle school science teachers (SMS & TMS)
- Building Level Administrator (Steve Perkins)
- Department of Student Learning (Becky FitzPatrick & Melanie Zenisek)





Resource

- Coherent Storylines
- Three-dimensional Learning Construction
- Hands-on Investigations
- Literacy & Mathematics Connections
- Spanish Translations
- Cross Device Technology



Resource

| | | | |
|-----|---|--|---|
| 6th | Ecosystems and Their Interactions | Matter and Its Interactions | Space Systems Exploration |
| 7th | Energy, Forces, and Motion | Structure and Function | Weather and Climate Systems |
| 8th | Electricity, Waves, and Information Transfer | Earth's Dynamic Systems | Genes and Molecular Machines |



PL

- 1) Introductory Level: An overview of each unit and focus on student notebooking
- 2) Intermediate Level: A deeper dive into content using student work to improve instructional practices
- 3) Online - Quick Tips: Resources for Teachers



PL

- Professional Learning 19-20
 - January 29 - Scope & Sequence Development
 - March 14 - Notebooking
 - April 13 - Exploring New Content/Assessment
- Professional Learning 20-21
 - Content Support for Teachers
 - Standards Based Grading Support
 - Continued Scope & Sequence Work



Cost

| | |
|-----------------------|-------------------|
| 6 th Grade | \$70,548 |
| 7 th Grade | \$65,522 |
| 8 th Grade | \$90,053 |
| Total | *\$226,123 |

**Includes professional development for staff, a class set of textbooks for each teacher, the online subscription for all students and teachers for six years, consumable materials for two years, and shipping. Buildings will absorb the consumable materials cost in years 3-6.*



8th Grade: Genes and Molecular Machines



Impact



Impact



Impact





Questions?