REMOTE LEARNING FEATURES REVIEW

Mathematical Models with Applications, Tx Ed
National Geographic Learning/Cengage

Section I. Remote Learning Features

Digital and printable resources

Student materials include both digital and printable resources.

Resource	Available Digitally	Printable
Student edition	Yes	Yes
Student workbook	Yes	Yes
Student worksheets	Yes	Yes
Texts / books	Yes	Yes
Subject specific tools	Yes	Yes
Activities	Yes	Yes
Quizzes	Yes	Yes
Tests	Yes	Yes

Printable resources can be printed by select pages. Two pages per print of the textbook can be printed from the *VitalSource* site. Some of the teacher resources, such as lesson plans and PowerPoint presentations can be edited prior to printing.

Tools for special populations

The digital student material on the *VitalSource* site contains the following tools for special populations:

● Text reader

- Font size adjustment
- Highlighters, annotation, and note taking tools

The student edition includes a text reader that narrates the text in a computer–modulated voice, the ability to increase or decrease font sizes, and tools for note taking, highlighting, and annotation.

Connection between print and digital components

Content in print and digital components is identical, but the digital version contains additional features and tools including a text reader, note taking and annotation tools, solution manuals, and font size adjustment.

The digital material endeavors to provide remote students with a learning experience that is equitable to that of in–person students by providing a student textbook that mirrors the content of the print version.

Completion, submission, and review of work

Students cannot complete and submit work online through the product platform. The platform requires student rostering.

Teachers must load content into the district LMS. Cengage will support student rostering and content loading into the LMS.

Teachers cannot review students' work or provide feedback online through the product platform.

Grade–level differences

Mathematical Models with Applications is a stand–alone high school course.

Section II: Synchronous Instruction

Teacher guidance for synchronous instruction

Teacher guidance does not address how to use this material in a synchronous learning environment.

Supports for student–to–student interaction

The material relies on the district LMS to support student–to–student interaction.

Supports for teacher–to–student and student–to–teacher interaction

The material's platform does not contain tools to facilitate remote student–to–teacher or teacher–to–student communication. Teachers and students can

communicate using the district's preferred video conferencing platform (Zoom, Teams, Google Meet).

Section III: Asynchronous Instruction

Support for asynchronous/independent learning

The material provides the following features to support concept development:

- Examples
- Solutions manual
- Audio files

Examples are provided for various problem types within each chapter of the digital textbook on the *VitalSource* site. The *Solutions Manual*, provided on the additional *Cengage Learning Student Companion* site, provides detailed solutions for odd numbered problems in each chapter. All chapters include audio files to support text readers. The speed of audio files can be adjusted to accommodate differences in students' auditory processing abilities.

Section IV. Progress Monitoring Features

Progress monitoring by teachers, parents/guardians, and students

The material does not include progress monitoring features.

Integration of progress monitoring tools

The program's progress monitoring features cannot be integrated with district progress monitoring systems. Grade pass–back is not supported.

Assessments

Assessments cannot be completed remotely through the material's platform.

Teacher guidance/recommendations

The material's progress monitoring features do not provide guidance or recommendations to help teachers support individual students.

Section V. Usability for Families

Sign–on process

Students sign–on to the system using their unique username and password.

Built–in support for students and families

The material provides a "Getting Started Student Guide" to help students and families understand the material's content.

Supports are available in English.

The material provides supports for special populations through reading and note taking tools and adjustable speed audio files in the digital student edition on the *VitalSource* site. The *Cengage Learning Teacher Companion* site includes an *ELPS Activities* guide to support English Learners.

Supports are available in English.

Districts will not incur additional costs for these supports.

Section VI. Training and Support for Teachers

Teacher training and support

The following embedded resources assist teachers in using the material for remote learning:

- Tech support
- Teacher guide
- How–to webinars
- Differentiation guidance

Teacher training and supports are provided in English.

Section VII. Addresses Unfinished Learning

Vertical alignment of standards and content

The Teacher's Planning Guide provides a summary of lessons, correlations to the Texas Essential Knowledge and Skills (TEKS), and a pacing guide for each chapter and lesson.

Guidance on how to address missed learning

The material provides a review chapter at the beginning of the textbook to review algebra concepts from previous courses. An assessment is provided at the end of the review chapter.

Texas Essential Knowledge and Skills (TEKS) aligned tutoring resources

The material does not include TEKS–aligned tutoring resources.