Carolina's Certified Version of OpenSciEd High School Biology



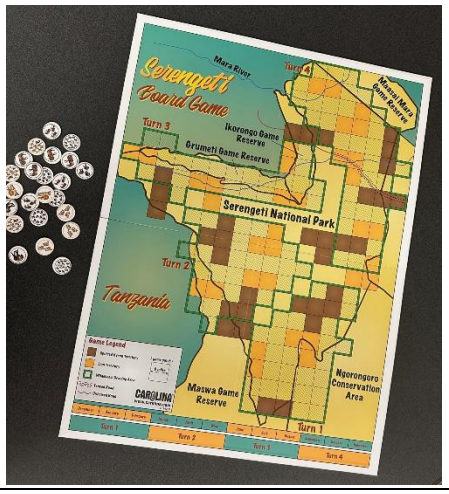
Unit Enhancement Sheets



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Unit B.1 | Ecosystem Interactions & Dynamics

Carolina provides a commercial grade boardgame with printed game pieces for the Serengeti Game. Classroom map posters were replaced with card sets for student groups.

LESSON	CAROLINA MODIFICATION
2	Replaced classroom Serengeti Map poster with a class card set for use by student pairs. The addition of protective sheet covers permits data recording for each class. • Provides increased student engagement and support • Ease of use for the teacher for each class
3	Replaced classroom Wildebeest Migration Map poster with a class card set for use by student pairs. The addition of protective sheet covers permits data recording for each class. • Provides increased student engagement and support • Ease of use for the teacher for each class
7	Kit includes commercial grade Serengeti Game board with game chips. • Reduces teacher prep-time • Larger size increases ease of student participation 

	Carolina created a virtual Serengeti Interactive Board Game that students can play on one computer, or multiple computers. This enhancement allows for differentiation for students and allows absent students to still have a way to participate in the learning experience. 
9	Revised Interest Holder cards to… The addition of protective sheet covers permits data recording for each class. • Increases ease of implementing investigation in the classroom • Ease of use for the teacher for each class
1-11	Carolina includes mini whiteboards and dry erase markers that students can use in lessons throughout the entire unit.

EQUIPMENT & MATERIALS

- Kits built to support the OER versions
- Provide enough materials for 8 lab groups
- Improved quality of photos and graphics on card sets and student handouts
- Teacher Interactive Board – Digital
- Editable 3D Test Banks – available for all lessons that do not already have a summative assessment or transfer task provided by OpenSciEd.

See Carolina Certified Materials List for more detailed information.

CAROLINA CERTIFIED VERSIONS

All modifications and enhancements to materials and/or lessons are approved by the OpenSciEd Curriculum Team to preserve the integrity of the storyline and instructional model for each unit.

- Redesigned print Teacher and Student Editions
- Digital versions of teacher and student resources
- Equipment kits with high-quality materials configured for 8 lab groups.



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Unit B.2 | Ecosystems: Matter & Energy

Carolina provides durable card sets to save teacher expense and time of printing/cutting individual card sets. Graphing applications and demo video are included to allow teacher flexibility to scaffold as needed.

LESSON	CAROLINA MODIFICATION
2	Peat chips are a needed but not supplied material. If the teacher is unable to obtain peat chips, the OSE video is included on Carolina Science Online for data collection purposes. Carolina provides Matter and Energy Question cards on durable card stock. This saves the teacher prep time of printing and cutting up to 100 individual cards.
3,4	Carolina provides Matter and Energy Card Set on durable card stock. This saves the teacher prep time of printing and cutting up to 360 individual cards.
5	Carolina includes flat-bottomed culture tubes to ensure stability and eliminate the need for bulky test tube racks. 
8	Carolina added an online graphing application labeled, Graphing Module, within the Carolina Science Online digital learning platform, which can be assigned out to students as appropriate. Carolina added an optional video, CO_2 - Temperature Investigation Demo. This is a great tool for students to utilize if absent on the day of the actual investigation.
9	Carolina provides Carbon Energy Quantitative Model cards on durable card stock. This saves the teacher prep time of printing and cutting up to 21 individual cards.

EQUIPMENT & MATERIALS

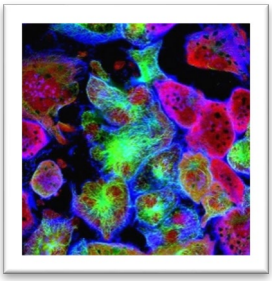
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Unit B.3 | Inheritance & Variation of Traits

Carolina provides durable Cell Game boards/game chips, card sets, as well as melt & pour YED media to save teacher prep time. Sheet protectors allow students to annotate cards as needed and erase them prior to next classes use.

LESSON	CAROLINA MODIFICATION
3	Carolina includes durable Cell Game boards printed on synthetic material to hold up to the wear and tear of consistent use over multiple class sections and ensure longevity. Kit contains cancer and non-cancer cell game chips with images printed directly on thick, glossy material. Teachers can easily pop out the pre-cut chips to save them the prep time of cutting out up to 288 small game chips. Carolina includes additional items printed on durable stock and cut as required. Including the following printed and precut card sets save the teacher prep time of printing and cutting upwards of 486 separate cards: • Cellular Chance cards • Checkpoint cards • Mitosis Card Sort • Mitosis Card Sort Key • Multiple Models
6	Kit contains preprinted, precut Amino Acid card sets. This saves the teacher prep time of printing and cutting up to 288 individual cards. Kit contains preprinted, precut DNA Sequences card sets. This saves the teacher prep time of printing and cutting up to 60 individual cards.
8	Kit contains p53 BRCA1 Pedigree printed on durable card stock. This saves the teacher prep time of printing 20 individual sheets.
9	Carolina includes Yeast-extract Dextrose in melt-n-pour bottles for easier teacher prep.
1-12	Carolina includes plastic zip-lock bags for storage (card sets and pony beads). Kit contains sheet protectors so students can annotate cards using water-based markers.

EQUIPMENT & MATERIALS

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- Improved quality of photos and graphics on card sets and student handouts
- Teacher Interactive Board – Digital
- Editable 3D Test Banks - Coming Soon!

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Unit B.4 | Natural Selection & Evolution of Populations

Carolina provides a small adjustable fan to prevent teachers from having to source a fan that meets investigation specification requirements. There are multiple pieces of assignable interactive digital content across the unit that supports teachers in assessing student progress in real time.

LESSON	CAROLINA MODIFICATION
2	Carolina includes a small adjustable fan that has been tested and works well our lab materials, rather than requiring teachers to source a fan locally that meets specifications required for performing the lab.
3	Enhanced digital includes an interactive Punnett square resource for remediation purposes. It can be assigned to help teachers easily assess student progress.  Carolina includes a video tutorial on Punnett Squares within the Carolina Science Online digital learning platform. Enhanced digital includes an assignable interactive version of the Rat Cross Model investigation to help teachers easily assess student progress.
5	Carolina added an optional interactive digital lesson on Darwin and the theory of evolution. It can be assigned to help teachers easily assess student progress. 
8	Carolina includes plastic containers with lids for pony bead storage.

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Unit B.5 | Common Ancestry & Speciation

Carolina provides durable posters, cards, and chips to ensure longevity of materials and save the teacher prep time.

LESSON	CAROLINA MODIFICATION
1	Carolina includes 5 laminated Bear Adaptation posters (24x22). This allows teachers to have one poster for each class section that can be used in future lessons and saves teachers the prep time of having to print and laminate a poster. Kit contains Inuvialuit Observations of Sea Ice and Ecosystems Quotes cut and printed on durable card stock. This saves the teacher prep time of printing and cutting 35 individual quote cards.
2	Carolina provides Matter and Energy Card sets on durable card stock. This saves the teacher prep time of printing and cutting up to 360 individual cards. Small sticky notes are included so students can add arrows and labels without writing on the Matter and Energy cards directly.
3	Carolina provides Bear Station Cards printed on glossy cardstock. This saves the teacher prep time of printing up to 80 sheets. A supply of sheet protectors are provided to further protect the Bear Station cards and maintain durability between multiple class sections.
4	Carolina includes Bear Trait stickers printed directly on chips to save teacher prep time of printing stickers and placing them on up to 480 chips. Kit contains 10 copies of the Bear Trait Key printed on quality card stock to save teacher prep time and ensure durability. Kit contains 10 sets of Bear Speciation Maps (24x22) printed on durable synthetic material. This saves the teacher prep time of printing up to 20 maps.
7	Carolina includes Mass Extinction Visual Inquiry slides printed on durable card stock.
1-9	Carolina includes plastic zipper lock bags for card and chip storage. Kit contains sheet protectors to protect cards/sheets used throughout the unit and maintain durability. Carolina provides adhesive putty for adhering print materials safely to walls.

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