#### New Fairfield Public Schools Textbook Selection Information

Title: Physics of the Universe Author: Pryor, Westleigh, Greenwood, Bainbridge-Smith, and Sole Publisher: BIOZONE International Limited Date: Copyright 2019

# The following criteria were adopted and/or adapted from the American Library Association Workbook for Selection Policy Writing.

# 1. Learning resources shall support and be consistent with the general educational goals of the state and the district and the aims and objectives of individual schools and specific courses.

The selected text is NGSS-aligned in both the content and the instructional shifts through 3D learning. 3D learning in NGSS includes the Disciplinary Core Ideas (DCIs), Science and Engineering Practices (SEPs), and Cross-Cutting Concepts (CCcs). The Biozone textbook integrates all three of these dimensions in every unit. Each unit begins with a phenomenon for discussion and investigation followed by lessons that build student knowledge towards modeling and understanding the phenomenon by the end of the unit. This text also supports the NGSS through the incorporation of inquiries, labs, and assessments, which facilitates instruction. Biozone is being used by the Los Angeles School District, which was a major pilot site for the NGSS standards.

# 2. Learning resources shall be chosen to enrich and support the curriculum and the personal needs of users.

Each book is a consumable, thus it functions both as a resource and as a personal record of the learner's knowledge and experiences. Moreover, it contains a multifaceted approach to learning through the use of data and phenomena-based instruction.

### 3. Learning resources shall meet high standards of quality in:

#### a. artistic quality and/or literary style

The text is colorful and includes high-quality images that are realistic and content-related.

#### b. factual content

The presentation of concepts is done in context and related to current topics and research in the scientific field of chemistry

#### c. physical format

Text is a high-quality soft-cover consumable.

#### d. presentation

Text consists of instructional sequences that are data-driven and NGSS-styled and that also utilize 3D instruction and the 5E model to learning (Engage, Explore, Explain, Extend, Evaluate).

#### 4. Learning resources shall be appropriate for the subject area and for the age, emotional development, ability level, learning styles, and social development of the students for whom the materials are selected.

After review by the NFHS physics team, it has been concluded that the text meets the needs of the various levels of high school learners. Moreover, because it focuses on student-related phenomena, it will be highly engaging and inviting to our students. Students are also using the same series for both Biology and Chemistry, so this should help students easily transition into using this textbook.

# 5. Learning resources shall promote an appreciation of cultural diversity.

The text puts forth a culturally neutral presentation. Different countries are represented in examples of scientific ideas given and generally diagrams and pictures are culturally unbiased.

6. Learning resources shall be designed to provide a background of information that will motivate students and staff to examine their own attitudes and behavior; to comprehend their duties, responsibilities, rights and privileges as participating citizens in our society; and to make informed judgments in their daily lives.

The integration of the earth science content within the physics-based curriculum allows for discussion about and discovery of important physics concepts as applied to earth systems. This includes such topics as radioactive decay and earth history, earthquake waves, the lives of stars, and electricity and magnetism which leads to the study of renewable energy.

# 7. The publisher provides appropriate support materials.

Online resources and teacher manuals are included in the purchase of the text.

# 8. Price per book and number needed

This text costs \$19.95 per physical book with 10% shipping. The initial purchase for next year will be of 280 student texts, due to the double cohort, for a total of \$6,986.00. 175 books will be purchased each year for an approximate total of \$3,841 per year.

You can view a text sample at:

https://issuu.com/biozone/docs/sp\_physics\_of\_the\_universe?e=3794344/61560865