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Resource ID#: 64462

Primary Type: Text Resource

Direct Link: <http://www.nature.com/scitable/topic/cell-cycle-and-cell-division-14122649>

Cell Cycle and Cell Division

This informational text resource is intended to support reading in the content area. The phases of the cell cycle are described, along with scientists' methods of studying the process. The proteins and cyclins involved in cell division are explained as well. The text ends by exploring future opportunities for discovery in this field.

General Information

Subject(s): Science, English Language Arts

Grade Level(s): 11, 12

Intended Audience: Educators

Freely Available: Yes

Keywords: text complexity, informational text, cell division, cell cycle, cancer, replication, cyclin

Instructional Component Type(s): Text Resource

Resource Collection: STEM Reading Resources

Attachment

[Final_Recommendation_Placement_CellCycle.pdf](#)

[Qualitative_Rubric_CellCycle.pdf](#)

[TextDependent_Questions_Cellcycle.pdf](#)

Additional Information/Instructions

By Author/Submitter

The grade band recommendation reflects the shifts inherent in the Florida Standards and is based on a text complexity analysis of a quantitative measure, qualitative rubric, and reader and task considerations.

Source and Access Information

Contributed by: jessica hladik

Name of Author/Source: Scitable by Nature Education

District/Organization of Contributor(s): St. Lucie

Is this Resource freely Available? Yes

Access Privileges: Public

Aligned Standards

| Name | Description |
|-------------------------------------|--|
| LAFS.1112.RST.1.1: | Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. |
| LAFS.1112.RST.2.4: | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. |
| LAFS.1112.RST.4.10: | By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently. |
| LAFS.1112.WHST.1.2: | <p>Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <ol style="list-style-type: none"> Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). |
| LAFS.1112.WHST.3.9: | Draw evidence from informational texts to support analysis, reflection, and research. |
| SC.912.L.16.8: | Explain the relationship between mutation, cell cycle, and uncontrolled cell growth potentially resulting in cancer. |
| SC.912.L.16.14: | Describe the cell cycle, including the process of mitosis. Explain the role of mitosis in the formation of new cells and its importance in maintaining chromosome number during asexual reproduction. |