

**Common Core State Standards for English Language Arts: K-12 Close Reading Task**

**Text grade band placement:**  
6-8

<b>Text</b>	<b>Text Complexity Analysis</b>
<p><b>Title:</b> "Earth's Magnetic Field"</p> <p><b>Author:</b> Fraser Cain</p> <p><b>Citation/Publication info:</b> <i>Universe Today</i>. March 12, 2009.</p> <p><b>Link:</b> <a href="http://www.universetoday.com/27005/earths-magnetic-field/#ixzz2Zuo8h4mq">http://www.universetoday.com/27005/earths-magnetic-field/#ixzz2Zuo8h4mq</a></p>	<p><b>Quantitative:</b> Lexile: 1100L</p> <hr/> <p><b>Qualitative:</b> The purpose is explicitly stated. The organization of main ideas is implicit and generally sequential. The vocabulary is somewhat complex and moderate levels of discipline-specific content are needed to fully comprehend the text.</p>

**ELA/Literacy Common Core Standards addressed by task**

CCSS.ELA-Literacy.RST.6-8.1 Cite specific textual evidence to support analysis of science and technical texts.

CCSS.ELA-Literacy.RST.6-8.2 Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

CCSS.ELA-Literacy.RST.6-8.8 Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

CCSS.ELA-Literacy.WHST.6-8.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

CCSS.ELA-Literacy.WHST.6-8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

**What key insights should students take from this text?**

After reading this article students should:

1. Analyze the idea that the Earth can be compared to a big magnet.

2. Investigate the protective nature of the Earth's magnetic field.
3. Identify the threat of the disappearance or reversal of the Earth's Magnetic Field.
4. Illustrate the position of the earth's magnetic field lines and poles.

### Text-Dependent Questions

1. Analyze the author's suggestion that the Earth is like a great big magnet. What evidence in the text supports his claim?
2. Investigate the idea that the earth's magnetic field protects the earth like an invisible force field. Cite evidence from the text that the Earth has need for the protection that the magnetic field provides.
3. Evaluate the likelihood that the earth's magnetic field will one day reverse. Support your ideas from the text.
4. Compare and contrast the earth's magnetic field with the magnetic field lines that are created when an electromagnet is made from an iron core coiled in copper wire and attached to a battery.

Writing Mode	Writing Prompt
Informative/explanatory	After reading the article "Earth's Magnetic Field" by Fraser Cain, identify one central idea from the source. Write an essay that summarizes and analyzes how the central idea is conveyed through particular details. Cite strong and thorough evidence from the source to support and develop your analysis.

#### **Scaffolding and support for special education students, English language learners, and struggling readers:**

- Have a clear reading purpose to help students focus more efficiently on the information they need to extract.
- Make sure students have the necessary background information before they are asked to read long texts.
- Pre-teach vocabulary.
- Encourage students to read about the topic beforehand, or discuss it at home with their parents.
- Have students predict the information they will find out in the text.
- Have students predict the vocabulary they will meet in the text.
- Remind students of the importance of looking at headings, diagrams, and illustrations and their captions.

#### **How this task supports the content standards for relevant subject area courses in this grade band:**

This article is appropriate for the 8<sup>th</sup> grade science course.

GLE 0807.12.3

Compare and contrast the Earth's magnetic field to that of a magnet and an electromagnet.

SPI 0807.12.3

Distinguish among the Earth's magnetic field, a magnet, and the fields that surround a magnet and an Electro-magnet.