**Science TTC1—Argumentation Task Samples**

**Task 1 Science Example:** After researching technical and academic articles on the use of pesticides in agriculture, write a speech that argues your position on the use of pesticides in managing crop production. Support your position with evidence from your research. L2 Be sure to acknowledge competing views. (Argumentation/Analysis)

**Task 2 Science Example:** Does genetic testing have the potential to significantly impact how we treat disease? After reading scientific sources, write a report that addresses the question and support your position with evidence from the texts. L2 Be sure to acknowledge competing views. L3 Give examples from past or current events or issues to illustrate and clarify your position. (Argumentation/Analysis)

**Task 3 Science Example:** After researching technical and scientific sources on soil types, write an article for a local paper that compares different soil types and argues which different types are best for growing potatoes, marigolds, and orange trees. Be sure to support your position with evidence from the texts. (Argumentation/Comparison)

**Task 4 Science:** Which is the better energy source? After reading scientific sources, write an essay that compares the physics involved in nuclear energy and fossil fuels and argues which is the better energy source for urban communities. Be sure to support your position with evidence from the texts. (Argumentation/Comparison)

**Task 5 Science Example:** After researching technical articles on ways to control drinking water quality, write an essay that discusses the impact of chemical and biological contamination and evaluates measures to protect water quality in your community. Be sure to support your position with evidence from your research. (Argumentation/Evaluation)

**Task 6 Science Example:** Is wind power a solution to energy shortages and costs? After reading the U.S. Department of Energy’s *Report on Alternative Energy Resources*, write an article that discusses wind power benefits and costs and evaluates whether wind power is an answer to America’s energy future. Be sure to support your position with evidence from the text. (Argumentation/Evaluation)

**Task 7 Science Example:** After researching scientific and technical sources on methods for preventing water shortages, write a proposal that identifies a problem faced by communities in arid regions and argues for a solution. Support your position with evidence from your research. L2 Be sure to examine competing views. L3 Give examples from past or current events or issues to illustrate and clarify your position. (Argumentation/Problem-Solution*)*

**Task 8 Science Example**: What would you recommend to help your community improve its air quality? After reading scientific articles on the potential for plant growth to improve air quality, write a proposal that identifies a problem related to air quality in your community and argues for a solution that would involve planting some varieties of flora. Support your position with evidence from the texts. (Argumentation/Problem-Solution)

**Task 9 Science Example:** After researching maps, data, and technical documents on land use in South America, write an essay that argues the causes of deforestation in the Amazon and explains the effects on populations and vegetation in the region. What implications can you draw? Support your discussion with evidence from the texts. (Argumentation/Cause-Effect)

**Task 10 Science Example:** What is the function of variation in living things? After reading scientific sources on variation in organisms, write an article for younger readers that argues the causes of variation among species and explains the effects of differences among species, such as color and other physical attributes. What implications can you draw? Support your discussion with evidence from the texts. (Argumentation/Cause-Effect)

**LDC Science TTC1--Informational Task Examples**

**Task 11 Science Example:** After researching scientific articles on magnetism, write a report that defines “magnetism” and explains its role in the planetary system. Support your discussion with evidence from your research. (Informational or Explanatory/Definition)

**Task 12 Science Example:** Can “talent” be learned? After reading scientific sources, write an essay that defines “innate abilities” and explains its relevance to “talent.” Support your discussion with evidence from the texts. (Informational or Explanatory/Definition

**Task 13 Science Example:** After researching cooking guides and articles on “kitchen chemistry,” write a manual for the general public that describes in detail how to use common products to solve an everyday problem such as cleaning fresh produce. Support your discussion with evidence from your research. (Informational or Explanatory/Description)

**Task 14 Science Example:** How do physical traits serve living things? After reading a book about butterflies, write an article that describes the features of three butterfly types and addresses the question. Support your discussion with evidence from the text. (Informational or Explanatory/Description)

**Task 15 Science Example:** After researching how-to guides on safety issues in a science lab, write a manual that relates how to safely conduct a flame test. Support your discussion with evidence from your research. (Informational or Explanatory/Procedural-Sequential)

**Task 16 Science Example:** Can the brain become smarter or is intelligence fixed? After reading articles on learning and the brain, write an article for your peers that relates how the brain develops over time from birth to twenty-five years. Support your discussion with evidence from the texts. (Informational or Explanatory/Procedural-Sequential)

**Task 17 Science Example:** After researching articles on wind power, developing a hypothesis, and conducting an experiment examining how wind power translates into useable energy, write a laboratory report that explains your procedures and results and confirms or rejects your hypothesis. What conclusion can you draw? (Informational or Explanatory/Procedural-Sequential)

**Task 18 Science Example:** After researching scientific documents on the issue of water contamination, write a report that explains the causes and the effects of contamination. What conclusion or implications can you draw? Cite at least four sources, pointing out key elements from each source. Include a bibliography of your sources. (Informational or Explanatory/Synthesis**)**

**Task 19 Science Example:** How does technology advance progress? After reading selections from scientific and historical documents and viewing videos on space travel, write an essay that explains the role of technologies that led to the first successful landing on the moon. What conclusion or implications can you draw? Cite at least six sources, pointing out key elements from each source. Include a bibliography. (Informational or Explanatory/Synthesis)

**Task 20 Science/Social Studies Example:** After researching articles on population growth in your region, write a report that analyzes the impact of such growth on water supplies, providing evidence to clarify your analysis. What implications can you draw? Include a bibliography. (Informational or Explanatory/Analysis)

**Task 20 Science/Mathematics Example:** After researching scientific documents and textbooks on the physics of speed, write an article that analyzes the factors that would help you win a remote-control car racing contest, providing evidence to clarify your analysis. What conclusion can you draw? L2 In your discussion, address the credibility and origin of sources in view of your research topic. Include a bibliography. (Informational or Explanatory/Analysis)

**Task 21 Science Example:** Why is the idea of absolute motion or rest misleading? After reading articles on the physics of motion, write an essay that addresses the question and analyzes the issue as raised by Copernicus and Galileo, providing examples to clarify your analysis. What conclusions or implications can your draw? L2 In your discussion, address the credibility and origin of sources in view of your research topic. Include a bibliography of your sources. (Informational or Explanatory/Analysis)

**Task 22 Science Example:** After researching scientific sources on the effects of play on the brain, write a report that compares the neurological effects of playing video games versus non-video game playing. (Informational or Explanatory/Comparison)

**Task 23 Science Example**: What are the effects of climate change? After reading at least four scientific articles on changes in climate conditions, write a report that compares how each author explains changes in climate at work today. (Informational or Explanatory/Comparison)

**Task 24 Science Example:** After researching maps and historical sources on land use in South America, write a report that examines causes of deforestation in the Amazon and explains effects on populations and vegetation in the region. What conclusions or implications can you draw? Support your discussion with evidence from your research. (Informational or Explanatory/Cause-Effect)

**Task 25 Science Example:** How can energy be changed from one form into another? After reading scientific sources on energy transformation, write a report that examines the causes of energy transformation and explains the effects when energy is transformed. What conclusions or implications can you draw? Support your discussion with evidence from the texts. (Informational or Explanatory/Cause-Effect)