



# Gold Seal Lesson

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<b>Grade Span</b>			<b>ICLE Application Model</b>			
K-4	5-8 X	9-12	A	B	C	D X

### Instructional Focus:

#### Basic Concepts and Knowledge

Students develop an understanding of scientific concepts using facts, theories, principles, and models.

#### Problem-Solving and Mathematical Reasoning

Students apply a variety of problem-solving strategies to investigate and solve problems from across the curriculum as well as from practical applications.

#### Number Operation and Concepts

Students use number, number sense, and number relationships in a problem-solving situation. Students communicate the reasoning used in solving these problems.

#### Reading

Students read a variety of grade level materials, applying strategies appropriate to various situations

#### Writing

Students write for a variety of purposes and audiences with sophistication and complexity appropriate to the grade level.

#### Language Arts Integration

Students synthesize individual language arts skills.

### Performance Task

A group of students in your school has written a petition to replace the cafeteria with a fast food restaurant. They have also talked to a few large chains (McDonalds, Burger King, Wendy's, Subway, KFC, Pizza Hut, Taco Bell, etc.) and all said they would be interested and would consider lowering their prices, modifying their menu, and keeping the current staff. The school board has said they would consider the students' request if they wrote a formal proposal. You have been asked to write the proposal for the group.

Choose one fast food restaurant and write a proposal with a brief introduction (two paragraphs), a conclusion (one page), and sections addressing the following issues:

1. Price—How do the fast food prices compare to cafeteria prices for three typical meals? Based on these three meals, on average, how much would the fast food restaurant have to lower its prices by in order to equal those of the cafeteria? You may use tables or charts to illustrate your findings. Show your calculations.
2. Nutrition—How do the two sets of meals compare in terms of nutritional content? Research the most important nutrients to consider when looking at nutritional value (total calories, fat, sugar, vitamins, etc.) and create a table or chart that compares the two sets of meals. For each factor that you list, provide a brief description of why it is important and the daily amounts that are considered healthy. List your sources for the descriptions of nutrients and nutrient data for the meals and show your calculations.
3. Student preference—Which meals would students prefer: cafeteria meals or fast food meals? Even if they like the fast food better, would it provide enough variety for them to eat it every day? If the change were made, would the number of students buying lunch at school increase, decrease, or stay the same? (Assume that there is no difference in price.) Explain the reasoning behind your answers. If you interviewed fellow students or conducted a survey, list the questions you asked.

## ICLE Essential Skills

Understand nutrition - the need for food and a good diet, ingestion, digestion, egestion and related disorders such as ulcers, appendicitis, etc. (s3)
Apply in writing the rules and conventions of grammar, usage, punctuation, paragraphing and spelling. (ela 1)
Gather information from a variety of sources, including electronic sources, and summarize, analyze, and evaluate its use for a report. (ela 3)
Present information in well-organized fashion that will be clear to the target audience. (ela 11)
Draft a report that engages an audience and is concise, clear, well-organized, accurate, and informative. (ela 12)
Understand and produce a variety of informative formats such as business letters, memos, reports, news articles, brochures, proposals and critiques. (ela 22)
Understand and use graphs, charts, and visuals to enhance informational writing and oral presentations. (ela 29)
Write a report on a topic that uses several sources of information and correctly document those sources. (ela 36a)
Understand and use graphics such as graphs, charts, visual aids, white space, bold print, headers and other graphics to enhance meaning. (ela 56)
Perform operations with signed (positive and negative) numbers, including decimals, ratios, percents, and fractions. (m1)
Understand the best procedures for statistical data collection, organization, and display including making estimates and predictions and drawing inferences. (m5)

### Scoring Guide:

Overall language 25 Points	<ul style="list-style-type: none"> <li>• Proposal uses appropriate format for a proposal, with sections clearly labeled</li> <li>• Student observes rules and conventions of standard written English, including spelling, grammar, punctuation, and diction.</li> <li>• Student uses appropriate sources for information</li> <li>• Sources are properly documented</li> <li>• Student attempts to write persuasively, but without blatantly misleading the reader</li> </ul>
Overall math 25 Points	<ul style="list-style-type: none"> <li>• Student uses appropriate mathematical reasoning to make comparisons</li> <li>• Student uses appropriate processes and formulas for calculating totals and percentages and converting units</li> <li>• Calculations are correct</li> <li>• Student presents data and chooses analyses selectively to best support case</li> </ul>
Introduction 5 Points	<ul style="list-style-type: none"> <li>• Describes background context and purpose of report</li> </ul>
Price comparison 10 Points	<ul style="list-style-type: none"> <li>• Identifies three typical meals at both cafeteria and fast food restaurant</li> <li>• Includes uses table or chart to compare prices</li> <li>• Chart or table presents key information clearly and is appropriately formatted and labeled</li> <li>• Includes estimate of average percentage amount fast food restaurant would have to lower prices by in order to equal those of the cafeteria</li> </ul>
Nutrition comparison 15 Points	<ul style="list-style-type: none"> <li>• Identifies key nutrients, provides correct explanation of why each is important, and the daily amounts that are considered healthy</li> <li>• Includes table or chart to compare nutritional content</li> <li>• Chart or table presents key information clearly and is appropriately formatted and labeled</li> <li>• Includes conclusion regarding whether food from one establishment is healthier than from another and the reasoning behind that conclusion</li> </ul>
Preference comparison 10 Points	<ul style="list-style-type: none"> <li>• Based on opinion of other students, obtained through interviews, survey, etc.</li> <li>• Provides statement of impact of change on number of meals bought and supports that is supported by data or logical reasoning</li> </ul>
Conclusion 10 Points	<ul style="list-style-type: none"> <li>• Summarizes the three sections and represents each accurately</li> <li>• Contains clearly identifiable argument for making the change</li> </ul>

**Keywords**

<b>English Language Arts</b>	<b>Mathematics</b>	<b>Science</b>
<b>Reading Research</b>	<b>Algebra</b>	<b>Earth Science</b>
<b>Writing Argumentative Citation Proposal</b>	<b>Geometry</b>	<b>Life Science Health Nutrition</b>
<b>Communications Visuals</b>	<b>Statistics Charts Data display Graphs Statistics in daily life Surveys Tables</b>	<b>Chemistry</b>
<b>Literature</b>	<b>Calculus</b>	<b>Physics</b>
<b>Other</b>	<b>Trigonometry</b>	<b>Other</b>
	<b>Other</b>	