

CELL BIOLOGY AND CANCER		
Idaho Science Content Standards – Biology		
Activity	Standard	Descriptor
1, 2, 3, 4	9-10.B.1.2.1	Use observations and data as evidence on which to base scientific explanations.
3, 4	9-10.B.1.2.2	Develop models to explain concepts or systems.
1, 2, 3, 4	9-10.B.1.2.3	Develop scientific explanations based on knowledge, logic and analysis.
3, 4	9-10.B.1.3.1	Measure changes that can occur in and among systems.
2, 3, 4	9-10.B.1.3.2	Analyze changes that can occur in and among systems.
3, 4	9-10.B.1.6.1	Identify questions and concepts that guide scientific investigations.
3, 4	9-10.B.1.6.2	Utilize the components of scientific problem solving to design, conduct, and communicate results of investigations.
3, 4	9-10.B.1.6.3	Use appropriate technology and mathematics to make investigations.
2, 3, 4	9-10.B.1.6.4	Formulate scientific explanations and models using logic and evidence.
1, 2, 3, 4	9-10.B.1.6.5	Analyze alternative explanations and models.
2, 3, 4, 5	9-10.B.1.6.6	Communicate and defend a scientific argument.
4	9-10.B.1.6.7	Explain the differences among observations, hypotheses, and theories.
1, 2, 3	9-10.B.1.8.1	Analyze technical writing, graphs, charts, and diagrams.
2	9-10.B.3.3.3	Explain how cells use DNA to store and use information for cell functions.
3	9-10.B.3.3.4	Explain how selective expression of genes can produce specialized cells from a single cell.
2	9-10.B.5.2.2	Explain how technology advances science.
Idaho Mathematics Content Standards – Grades 9 - 10		
Activity	Standard	Descriptor
3, 4	9.M.1.1.2 10.M.1.1.2	Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations.

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3, 4	9.M.1.1.6 10.M.1.1.6	Use appropriate vocabulary.
3, 4	9.M.1.3.1 10.M.1.3.1	Apply number sense to everyday situations and judge reasonableness of results.
3	9.M.3.1.1 10.M.3.1.1	Represent mathematical relationships using variables, expressions, linear equations and inequalities.
3	9.M.4.4.1 10.M.4.4.1	Create graphs and equations for linear relationships.
3	9.M.4.4.2 10.M.4.4.2	Represent linear relationships using tables, graphs, and mathematical symbols.
3	10.M.4.5.1	Use logic to make and evaluate mathematical arguments.
3	9.M.5.1.1 10.M.5.1.1	Analyze and interpret tables, charts, and graphs, including scatter plots, broken line graphs, and box-and-whisker plots.
1, 3, 4	9.M.5.2.1 10.M.5.2.1	Collect, organize, and display data in tables, charts, and graphs.
1, 3	9.M.5.5.1 10.M.5.5.1	Make predictions based on randomness, chance, equally likely events, and probability.
3, 4	9.M.5.5.2 10.M.5.5.2	Use appropriate tools/technology to conduct simulations and employ graphical models to make predictions or decisions based on data.
Idaho Language Arts Content Standards – Grades 9 - 10		
Activity	Standard	Descriptor
1, 2, 3, 4	9.LA.1.8.2 10.LA.1.8.2	Use context analysis to determine the meanings of unfamiliar words.
All activities	9.LA.2.1.1	Synthesize the content from several sources on a single issue; paraphrase ideas to demonstrate comprehension.
All activities	10.LA.2.1.1	Synthesize the content from several sources on a single issue; compare and contrast ideas to demonstrate comprehension.
All activities	9.LA.2.2.2 10.LA.2.2.2	Define the purpose and audience of a variety of communication formats (e.g., essays, letters, user manuals, lab reports, websites).

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All activities	9.LA.3.1.2 10.LA.3.1.2	Generate a main idea or thesis appropriate to a type of writing.
All activities	9.LA.3.1.4 10.LA.3.1.4	Match format to purpose and audience.
All activities	9.LA.3.2.2 10.LA.3.2.2	Sequence ideas in a cohesive, meaningful order.
All activities	9.LA.3.3.4 10.LA.3.3.4	Use a variety of sentence structures to improve sentence fluency and enhance style.
All activities	9.LA.3.5.2 10.LA.3.5.2	Share writing with intended audience.
3, 4	9.LA.4.2.3	Write technical or scientific text that identifies a sequence of activities or processes.
5	9.LA.4.3.1	Write persuasive compositions that organize ideas and evidence in a sustained and effective fashion.
5	10.LA.4.3.1	Write persuasive compositions that use specific rhetorical devices to support assertions (e.g., appealing to logic thorough reasoning; appealing to emotion or ethical belief; or relating a personal anecdote or analogy).
Idaho Speech Content Standards – Grades 9 - 12		
Activity	Standard	Descriptor
All activities	9-12.Spch.6.1.3	Draw conclusions about the ideas under discussion and support those conclusions with convincing evidence.
1, 2, 3, 4	9-12.Spch.6.2.5	Use effective and interesting language, including formal expressions for effect, standard English for clarity, and technical language for specificity.
2	9-12.Spch.6.2.7	Deliver narrative presentations that narrate a sequence of events and communicate their significance to the audience.
2, 3, 4	9-12.Spch.6.2.8	Deliver expository presentations that provide evidence in support of a thesis. Include related claims and include information on all relevant perspectives.
5	9-12.Spch.6.2.10	Deliver persuasive arguments (e.g., evaluation and analysis of problems and solutions, causes and effects) that structure ideas and arguments in a coherent, logical fashion.
4, 5	9-12.Spch.6.3.3	Analyze the techniques used in media messages for a particular audience and evaluate their effectiveness.

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Idaho Health Content Standards – Grades 9 - 12		
Activity	Standard	Descriptor
2, 3, 4	9-12.H.1.1.5	Identify and evaluate the prevention, causes, symptoms, treatment, and consequences of diseases and disorders.
2, 3	9-12.H.1.1.6	Assess environmental and other external factors that affect individual and community health (public health policies, governmental regulations, research).
1, 5	9-12.H.2.1.3	Evaluate the impact of risky behaviors on personal and community health.
4, 5	9-12.H.2.1.4	Identify prevention strategies that address positive behaviors and their benefits.
4	9-12.H.4.1.1	Evaluate the validity of health information, products and services (advertising claims, quackery, fraudulence, health-related research).
2, 3	9-12.H.4.1.2	Evaluate resources from home, school, library, and the community that provide valid health care information.
4	9-12.H.4.1.3	Evaluate factors and situations that influence personal selection of health care products and services (when to seek treatment, when or what product to use).