	College Readiness Standards for Science Reasoning		
	Interpretation of Data	**Scientific Investigation**	**Evaluation of Models, Inferences, and Experim'l Results**
13-15	IOD 201 Select one piece of data from a simple data presentation (e.g., a simple food web diagram) IOD 202 Identify basic features of a table, graph, or diagram (e.g., units of measurement) IOD 203 Find basic information in text that describes a simple data presentation	SIN 201 Find basic information in text that describes a simple experiment SIN 202 Understand the tools and functions of tools used in a simple experiment	EMI 201 Find basic information in a model (conceptual)
16-19	IOD 301 Select two or more pieces of data from a simple data presentation IOD 302 Understand basic scientific terminology IOD 303 Find basic information in text that describes a complex data presentation IOD 304 Determine how the values of variables change as the value of another variable changes in a simple data presentation	SIN 301 Understand the methods used in a simple experiment SIN 302 Understand the tools and functions of tools used in a complex experiment SIN 303 Find basic information in text that describes a complex experiment	EMI 301 Identify implications in a model EMI 302 Determine which models present certain basic information
20-23	IOD 401 Select data from a complex data presentation (e.g., a phase diagram) IOD 402 Compare or combine data from a simple data presentation (e.g., order or sum data from a table) IOD 403 Translate information into a table, graph, or diagram IOD 404 Perform a simple interpolation or simple extrapolation using data in a table or graph	SIN 401 Understand a simple experimental design SIN 402 Understand the methods used in a complex experiment SIN 403 Identify a control in an experiment SIN 404 Identify similarities and differences between experiments SIN 405 Determine which experiments utilized a given tool, method, or aspect of design	EMI 401 Determine which simple hypothesis, prediction, or conclusion is, or is not, consistent with a data presentation, model, or piece of information in text EMI 402 Identify assumptions in a model EMI 403 Determine which models imply certain information EMI 404 Identify similarities and differences between models
24-27	IOD 501 Compare or combine data from two or more simple data presentations (e.g., categorize data from a table using a scale from another table) IOD 502 Compare or combine data from a complex data presentation IOD 503 Determine how the value of one variable changes as the value of another variable changes in a complex data presentation IOD 504 Determine and/or use a simple (e.g., linear) mathematical relationship that exists between data IOD 505 Analyze presented information when given new, simple information	SIN 501 Understand a complex experimental design SIN 502 Predict the results of an additional trial or measurement in an experiment SIN 503 Determine the experimental conditions that would produce specified results	EMI 501 Determine which simple hypothesis, prediction, or conclusion is, or is not, consistent with two or more data presentations, models, and/or pieces of information in text EMI 502 Determine whether presented information, or new information, supports or contradicts a simple hypothesis or conclusion, and why EMI 503 Identify strengths and weaknesses of models EMI 504 Determine which models are supported or weakened by new information EMI 505 Determine which experimental results or models support or contradict a hypothesis, prediction, or conclusion

28-32	IOD 601 Compare or combine data from a simple data presentation with data from a complex data presentation IOD 602 Identify and/or use a complex (e.g., nonlinear) mathematical relationship between data IOD 603 Perform a complex interpolation or complex extrapolation using data in a table or graph	SIN 601 Determine the hypothesis for an experiment SIN 602 Determine an alternate method for testing a hypothesis	EMI 601 Determine which complex hypothesis, prediction, or conclusion is, or is not, consistent with a data presentation, model, or piece of information in text EMI 602 Determine whether presented information, or new information, supports or weakens a model, and why EMI 603 Use new information to make a prediction based on a model
33-36	IOD 701 Compare or combine data from two or more complex data presentations IOD 702 Analyze presented information when given new, complex information	SIN 701 Understand precision and accuracy issues SIN 702 Predict the effects of modifying the design or methods of an experiment SIN 703 Determine which additional trial or experiment could be performed to enhance or evaluate experimental results	EMI 701 Determine which complex hypothesis, prediction, or conclusion is, or is not, consistent with two or more data presentations, models, and/or pieces of information in text EMI 702 Determine whether presented information, or new information, supports or contradicts a complex hypothesis or conclusion, and why