ACT SCIENCE CCR STANDARDS

|  |  |
| --- | --- |
| **Table 1. Science College and Career Readiness Standards for Score Ranges 13–15** | **Is this covered in my curriculum?** |
| Select one piece of data from a simple data presentation (e.g., a simple food web diagram) |  |
| Identify basic features of a table, graph, or diagram (e.g., units of measurement) |  |
| Find basic information in text that describes a simple data presentation |  |
| Find basic information in text that describes a simple experiment |  |
| Understand the tools and functions of tools used in a simple experiment |  |
| Find basic information in a model (conceptual) |  |

|  |  |
| --- | --- |
| **Table 2. Science College and Career Readiness Standards for Score Ranges 16–19** | **Is this covered in my curriculum?** |
| Select two or more pieces of data from a simple data presentation |  |
| Understand basic scientific terminology |  |
| Find basic information in text that describes a complex data presentation |  |
| Determine how the values of variables change as the value of another variable changes in a simple data presentation |  |
| Understand the methods used in a simple experiment |  |
| Understand the tools and functions of tools used in a complex experiment |  |
| Find basic information in text that describes a complex experiment |  |
| Identify implications in a mode |  |
| Determine which models present certain basic information |  |

|  |  |
| --- | --- |
| **Table 3. Science College and Career Readiness Standards for Score Ranges 20–23** | **Is this covered in my curriculum?** |
| Select data from a complex data presentation (e.g., a phase diagram) |  |
| Compare or combine data from a simple data presentation (e.g., order or sum data from a table) |  |
| Translate information into a table, graph, or diagram |  |
| Perform a simple interpolation or simple extrapolation using data in a table or graph |  |
| Understand a simple experimental design |  |
| Understand the methods used in a complex experiment |  |
| Identify a control in an experiment |  |
| Identify similarities and differences between experiments |  |
| Determine which experiments utilized a given tool, method, or aspect of design |  |
| Determine which simple hypothesis, prediction, or conclusion is, or is not, consistent with a data presentation, model, or piece of information in text |  |
| Identify key assumptions in a model |  |
| Determine which models imply certain information |  |
| Identify similarities and differences between models |  |

|  |  |
| --- | --- |
| **Table 4. Science College and Career Readiness Standards for Score Ranges 24–27** | **Is this covered in my curriculum?** |
| Compare or combine data from two or more simple data presentations (e.g., categorize data from a table using a scale from another table) |  |
| Compare or combine data from a complex data presentation |  |
| Determine how the values of variables change as the value of another variable changes in a complex data presentation |  |
| Determine and/or use a simple (e.g., linear) mathematical relationship that exists between data |  |
| Analyze presented information when given new, simple information |  |
| Understand a complex experimental design |  |
| Predict the results of an additional trial or measurement in an experiment |  |
| Determine the experimental conditions that would produce specified results |  |
| 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 |  |
| Determine whether presented information, or new information, supports or contradicts a simple hypothesis or conclusion, and why |  |
| Identify the strengths and weaknesses of models |  |
| Determine which models are supported or weakened by new information |  |
| Determine which experimental results or models support or contradict a hypothesis, prediction, or conclusion |  |

|  |  |
| --- | --- |
| **Table 5. Science College and Career Readiness Standards for Score Ranges 28–32** | **Is this covered in my curriculum?** |
| Compare or combine data from two or more simple data presentations (e.g., categorize data from a table using a scale from another table) |  |
| Compare or combine data from a complex data presentation |  |
| Determine how the values of variables change as the value of another variable changes in a complex data presentation |  |
| Determine and/or use a simple (e.g., linear) mathematical relationship that exists between data |  |
| Analyze presented information when given new, simple information |  |
| Understand a complex experimental design |  |
| Predict the results of an additional trial or measurement in an experiment |  |
| Determine the experimental conditions that would produce specified results |  |
| 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 |  |
| Determine whether presented information, or new information, supports or contradicts a simple hypothesis or conclusion, and why |  |
| Identify the strengths and weaknesses of models |  |
| Determine which models are supported or weakened by new information |  |
| Determine which experimental results or models support or contradict a hypothesis, prediction, or conclusion |  |

|  |  |
| --- | --- |
| **Table 6. Science College and Career Readiness Standards for Score Ranges 33–36** | **Is this covered in my curriculum?** |
| Compare or combine data from two or more complex data presentations |  |
| Analyze presented information when given new, complex information |  |
| Understand precision and accuracy issues |  |
| Predict the effects of modifying the design or methods of an experiment |  |
| Determine which additional trial or experiment could be performed to enhance or evaluate experimental results |  |
| 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 |  |
| Determine whether presented information, or new information, supports or contradicts a complex hypothesis or conclusion, and why |  |