



▶ SCIENCE

SCORE RANGE	
13-15	<p>IOD 201. Select one piece of data from a simple data presentation (e.g., a simple food web diagram)</p> <p>IOD 202. Identify basic features of a table, graph, or diagram (e.g., units of measurement)</p> <p>IOD 203. Find basic information in text that describes a simple data presentation</p>
16-19	
20-23	

Students who score in the 1-12 range are most likely beginning to develop the knowledge and skills assessed in the other ranges.

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THE ACT COLLEGE READINESS BENCHMARK FOR SCIENCE IS 23. Students who achieve this score on the ACT Science Test have a 50% likelihood of achieving a B or better in a science course at a typical college. The knowledge and skills highly likely to be demonstrated by students who meet the Benchmark are shaded.

► SCIENCE

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 values of variables change 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

28-32

IOD 601. Compare or combine data from a simple data presentation with data from a complex data presentation

IOD 602. Determine and/or use a complex (e.g., nonlinear) mathematical relationship that exists between data

IOD 603. Perform a complex interpolation or complex extrapolation using data in a table or graph

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



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SCORE RANGE	
13-15	<p>SIN 201. Find basic information in text that describes a simple experiment</p> <p>SIN 202. Understand the tools and functions of tools used in a simple experiment</p>
16-19	<p>SIN 301. Understand the methods used in a simple experiment</p> <p>SIN 302. Understand the tools and functions of tools used in a complex experiment</p> <p>SIN 303. Find basic information in text that describes a complex experiment</p>
20-23	<p>SIN 401. Understand a simple experimental design</p> <p>SIN 402. Understand the methods used in a complex experiment</p> <p>SIN 403. Identify a control in an experiment</p> <p>SIN 404. Identify similarities and differences between experiments</p> <p>SIN 405. Determine which experiments utilized a given tool, method, or aspect of design</p>

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SCORE RANGE	
24-27	<p>SIN 501. Understand a complex experimental design</p> <p>SIN 502. Predict the results of an additional trial or measurement in an experiment</p> <p>SIN 503. Determine the experimental conditions that would produce</p>
28-32	<p>SIN 601. Determine the hypothesis for an experiment</p> <p>SIN 602. Determine an alternate method for testing a hypothesis</p>
33-36	<p>SIN 701. Understand precision and accuracy issues</p> <p>SIN 702. Predict the effects of modifying the design or methods of an experiment</p> <p>SIN 703. Determine which additional trial or experiment could be performed to enhance or evaluate experimental results</p>



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SCORE RANGE	
13-15	<p>EMI 201. Find basic information in a model (conceptual)</p>
16-19	<p>EMI 301. Identify implications in a model</p> <p>EMI 302. Determine which models present certain basic information</p>
20-23	<p>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</p> <p>EMI 402. Identify key assumptions in a model</p> <p>EMI 403. Determine which models imply certain information</p> <p>EMI 404. Identify similarities</p>

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	<p>EMI 701. Determine which complex hypothesis, prediction, or conclusion is, or is not, consistent with two or more data</p>

▶ SCIENCE

ACT College and Career Readiness Standards for Science are measured in rich and authentic contexts based on science content that students encounter in science courses. This content includes:

LIFE SCIENCE/BIOLOGY

- Animal behavior
- Animal development and growth
- Body systems
- Cell structure and processes
- Ecology
- Evolution
- Genetics
- Homeostasis
- Life cycles
- Molecular basis of heredity
- Origin of life
- Photosynthesis
- Plant development, growth, structure
- Populations
- Taxonomy

PHYSICAL SCIENCE/CHEMISTRY, PHYSICS

- Atomic structure
- Chemical bonding, equations, nomenclature, reactions
- Electrical circuits
- Elements, compounds, mixtures
- Force and motions
- Gravitation
- Heat and work
- Kinetic and potential energy
- Magnetism
- Momentum
- The periodic table
- Properties of solutions
- Sound and light
- States, classes, and properties of matter
- Waves

EARTH AND SPACE SCIENCE

- Earthquakes and volcanoes
- Earth's atmosphere
- Earth's resources
- Fossils and geological time
- Geochemical cycles
- Groundwater
- Lakes, rivers, oceans
- Mass movements
- Plate tectonics
- Rocks, minerals
- Solar system
- Stars, galaxies, and the universe
- Water cycle
- Weather and climate
- Weathering and erosion