



South Carolina Science Standards: Track Casting

Third Grade

1. Science and Engineering Practices
 - a. 3.S.1A.4
 - i. Analyze and interpret data from observations, measurements, or investigations to understand patterns and meanings.
 - b. 3.S.1A.7
 - i. Construct scientific arguments to support claims, explanations, or designs using evidence from observations, data, or informational texts.
 - c. 3.S.1A.8
 - i. Obtain and evaluate informational texts, observations, data collected, or discussions to (1) generate and answer questions, (2) understand phenomena, (3) develop models, or (4) support explanations, claims, or designs. Communicate observations and explanations using the conventions and expectations of oral and written language.

Fourth Grade

1. Science and Engineering Practices
 - a. 4.S.1A.4

- i. Analyze and interpret data from informational texts, observations, measurements, or investigations using a range of methods (such as tabulation or graphing) to (1) reveal patterns and construct meaning or (2) support explanations, claims, or designs.
- b. 4.S.1A.7
 - i. Construct scientific arguments to support claims, explanations, or designs using evidence from observations, data, or informational texts.
- c. 4.S.1A.8
 - i. Obtain and evaluate informational texts, observations, data collected, or discussions to (1) generate and answer questions, (2) understand phenomena, (3) develop models, or (4) support explanations, claims, or designs. Communicate observations and explanations using the conventions and expectations of oral and written language.

Fifth Grade

1. Science and Engineering Practices

- a. 5.S.1A.2
 - i. Develop, use, and refine models to (1) understand or represent phenomena, processes, and relationships, (2) test devices or solutions, or (3) communicate ideas to others.
- b. 5.S.1A.6
 - i. Construct explanations of phenomena using (1) scientific evidence and models, (2) conclusions from scientific investigations, (3) predictions based on observations and measurements, or (4) data communicated in graphs, tables, or diagrams.
- c. 5.S.1A.7
 - i. Construct scientific arguments to support claims, explanations, or designs using evidence from observations, data, or informational texts.
- d. 5.S.1A.8

- i. Obtain and evaluate informational texts, observations, data collected, or discussions to (1) generate and answer questions, (2) understand phenomena, (3) develop models, or (4) support explanations, claims, or designs. Communicate observations and explanations using the conventions and expectations of oral and written language.

Sixth Grade

1. Science and Engineering Practices

a. 6.S.1A.2

- i. Develop, use, and refine models to (1) understand or represent phenomena, processes, and relationships, (2) test devices or solutions, or (3) communicate ideas to others.

b. 6.S.1A.6

- i. Construct explanations of phenomena using (1) primary or secondary scientific evidence and models, (2) conclusions from scientific investigations, (3) predictions based on observations and measurements, or (4) data communicated in graphs, tables, or diagrams.

c. 6.S.1A.7

- i. Construct and analyze scientific arguments to support claims, explanations, or designs using evidence from observations, data, or informational texts.

d. 6.S.1A.8

- i. Obtain and evaluate scientific information to (1) answer questions, (2) explain or describe phenomena, (3) develop models, (4) evaluate hypotheses, explanations, claims, or designs or (5) identify and/or fill gaps in knowledge. Communicate using the conventions and expectations of scientific writing or oral presentations by (1) evaluating grade-appropriate primary or secondary scientific literature, or (2) reporting the results of student experimental investigations.

Seventh Grade

1. Science and Engineering Practices

a. 7.S.1A.2

- i. Develop, use, and refine models to (1) understand or represent phenomena, processes, and relationships, (2) test devices or solutions, or (3) communicate ideas to others.

b. 7.S.1A.6

- i. Construct explanations of phenomena using (1) primary or secondary scientific evidence and models, (2) conclusions from scientific investigations, (3) predictions based on observations and measurements, or (4) data communicated in graphs, tables, or diagrams.

c. 7.S.1A.7

- i. Construct and analyze scientific arguments to support claims, explanations, or designs using evidence from observations, data, or informational texts.

d. 7.S.1A.8

- i. Obtain and evaluate scientific information to (1) answer questions, (2) explain or describe phenomena, (3) develop models, (4) evaluate hypotheses, explanations, claims, or designs or (5) identify and/or fill gaps in knowledge. Communicate using the conventions and expectations of scientific writing or oral presentations by (1) evaluating grade-appropriate primary or secondary scientific literature, or (2) reporting the results of student experimental investigations.