

SREB

**Innovations in Science
and Technology -
Course 4**

Code: 9047

INNOVATIONS IN SCIENCE AND TECHNOLOGY –
COURSE 4
Test Code: 9047
Version: 01

Specific Competencies and Skills Tested in this Assessment:

Information about the AC course standards can be found in the front of the AC course teacher guide.

CTE

1B CTE

1C CTE

1D CTE

Technological Literacy #10 CTE

Standards for Technological Literacy #11 CTE

Standards for Technological Literacy #13 CTE

Standards for Technological Literacy #16 CTE

Standards for Technological Literacy #17 CTE

Literacy

RST.9-10.1 Literacy

RST.9-10.3 Literacy

RST 9-10.3 Literacy

RST.11-12.1 Literacy

RST 11-12.2 Literacy

RST.11-12.2 Literacy

RST.11-12.4 Literacy

RST 11-12.4 Literacy

RST 11-12.10 Literacy

RST11-12.10 Literacy

RST.11-12.10 Literacy

Math

A-CED-2 Math

A-REI-6 Math

G-MG-3 Math

N-Q-1 Math

Innovations in Science and Technology – Course 4 (continued)

Math

N-Q-2 Math

N-Q-3 Math

S-IC-6 Math

S-ID-3 Math

S-ID-6 Math

Science

HS-ESS3-4 Science

HS-ETS1-2 Science

HS-ETS1-3 Science

HS-ETS1-4 Science

HS-LS2-3 Science

HS-PS1-6 Science

HS-PS3-3 Science

Innovations in Science and Technology – Course 4 (continued)

Written Assessment:

Administration Time: unlimited

Number of Questions: 64

Areas covered:

37%	CTE
22%	Literacy
19%	Math
22%	Science

Sample Questions:

Land surveyors utilize GPS to:

- A. Identify places to eat lunch
- B. Program motion of an elevator
- C. Establish boundaries and turning points
- D. Predict the margin of profit on a solution

Which quadrant would the GPS coordinate S 54 E lie in?

- A. Quadrant I: the NE quadrant
- B. Quadrant IV: the E quadrant
- C. Quadrant IV: the SE quadrant
- D. Quadrant III: the SE quadrant

How does ethanol fermentation work?

- A. Microscopic organisms perform aerobics to make ethanol
- B. Bacteria and yeast convert sugar and other ingredients into oxygen and carbon dioxide
- C. Microorganisms carry out anaerobic processes to produce ethanol and other byproducts
- D. Ethanol is produced from corn or other biofuels from glycolic energy