

Quiz Summary

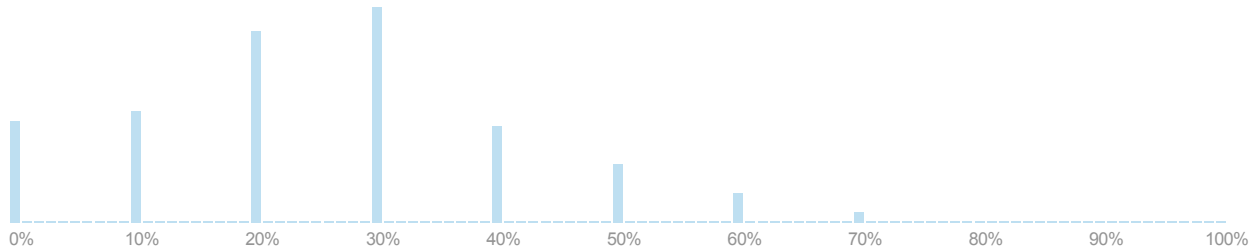
Section Filter ▾

Generated: Oct 2, 2015

Student Analysis (https://usu.instructure.com/files/58673213/download?download_frd=1&verifier=97cRRkLA5puZXIGBzrQ3Z911CGycZVviriqAVentj)

Item Analysis (https://usu.instructure.com/files/58673218/download?download_frd=1&verifier=ir0SNVEmuo79G1vZtb7uhOhFCwUPQ1vjVIAD5Hby)

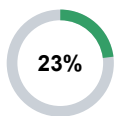
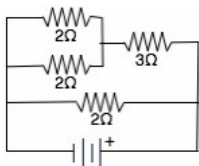
Average Score	High Score	Low Score	Standard Deviation	Average Time
25%	70%	0%	1.61	07:22



Question Breakdown

Attempts: 167 out of 169

What is the total resistance of the circuit below?



Correct answer
23% of your students correctly answered this question.

+0.47 Discrimination Index



5% 1/3 ohm
8 respondents

23% 4/3 ohm
39 respondents

20% 2 ohm
33 respondents

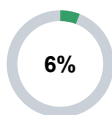
11% 6 ohm
19 respondents

40% I don't know
68 respondents

1% No Answer
2 respondents

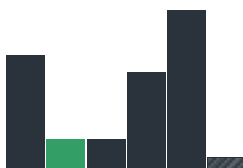
Attempts: 166 out of 169

A really strong French chef throws a 1 meter long baguette at you for insulting his croissants. You dodge the loaf, which is quite a feat because it is moving at four-fifths the speed of light. How long does the loaf look to you as it whizzes by your head?



Correct answer
6% of your students correctly answered this question.

+0.30 Discrimination Index



26% 1/5 m
44 respondents

6% 3/5 m
10 respondents

6% 1 m
10 respondents

22% 5/4 m
37 respondents

38% I don't know
65 respondents

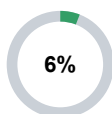
2% No Answer
3 respondents

Attempts: 167 out of 169



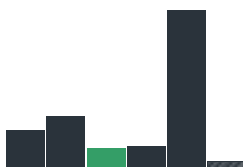
For an electromagnetic wave moving through vacuum, what is the ratio of the magnitude of the electric field to the magnitude of the magnetic field equal to?

- a) ϵ_0
- b) $4\pi\epsilon_0$
- c) c
- d) c^2
- e) I don't know.



Correct answer
6% of your students correctly answered this question.

+0.27 Discrimination Index



12% a)
21 respondents

17% b)
29 respondents

6% c)
10 respondents

7% d)
11 respondents

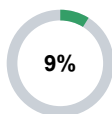
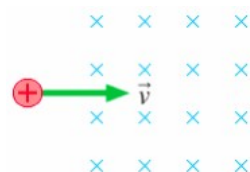
57% e)
96 respondents

1% No Answer
2 respondents

Attempts: 167 out of 169

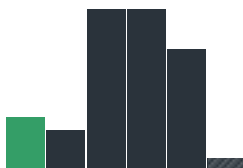


In which direction does the proton initially deflect as it passes into the magnetic field in the diagram below? The magnetic field is directed into the page.



Correct answer
9% of your students correctly answered this question.

+0.31 Discrimination Index



9% up 15 respondents	7% down 11 respondents
31% into the page 52 respondents	31% out of the page 52 respondents
22% I don't know 37 respondents	1% No Answer 2 respondents

Attempts: 167 out of 169

Which of the following can be completely explained without quantum physics?

13% Correct answer

13% of your students correctly answered this question.

+0.28 Discrimination Index

17% The Balmer series 29 respondents	12% The work function of the photoelectric effect. 21 respondents
13% The interference pattern of light. 22 respondents	9% The interference pattern of electrons. 16 respondents
47% I don't know. 79 respondents	1% No Answer 2 respondents

Attempts: 167 out of 169

This image was most likely created by passing one wavelength of light through

+0.37 Discrimination Index

32% Correct answer

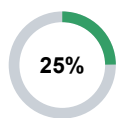
32% of your students correctly answered this question.

9% a circular aperture. 16 respondents	32% a single slit. 54 respondents
15% a double slit. 25 respondents	22% a diffraction grating. 37 respondents
21% I don't know. 35 respondents	1% No Answer 2 respondents

Attempts: 166 out of 169



A stream of protons, electrons and oxygen atoms pass at the same speed through a 1 micrometer-wide slit. Which stream will produce the widest diffraction pattern on a detector behind the slit?



Correct answer
25% of your students correctly answered this question.

+0.44 Discrimination Index



4% The protons.
6 respondents

25% The electrons.
42 respondents

24% The oxygen atoms.
41 respondents

4% All three will be the same.
7 respondents

2% None of them will produce a diffraction pattern.
4 respondents

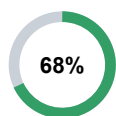
39% I don't know.
66 respondents

2% No Answer
3 respondents

Attempts: 166 out of 169



This image shows a point (the dot) among two equal positive charges and a negative charge. At the dot, the electric field points



Correct answer
68% of your students correctly answered this question.

+0.44 Discrimination Index



68% left
115 respondents

17% right
29 respondents

1% up
1 respondents

0% down

5% nowhere. The electric field is zero.
8 respondents

8% I don't know.
13 respondents

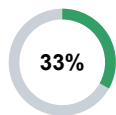
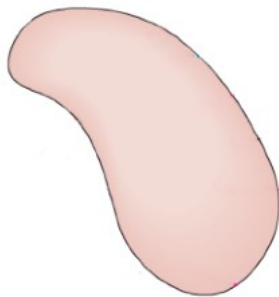
2% No Answer
3 respondents

Attempts: 166 out of 169

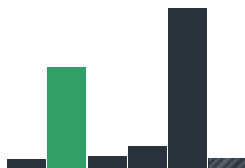
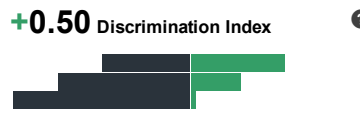


The image shows a blob shaped closed surface, with total area A , and has several charges scattered randomly throughout the volume it encloses. In total there are 6 free electrons and 17 free protons within the blob. If q represents the fundamental charge of a proton and ϵ_0 is the permittivity of free space, then what is the electric flux through the surface?

- a) $23 \frac{q^2}{A}$
- b) $11 \frac{q}{\epsilon_0}$
- c) $-6qA$
- d) $\epsilon_0 A$
- e) I don't know



Correct answer
33% of your students correctly answered this question.



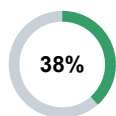
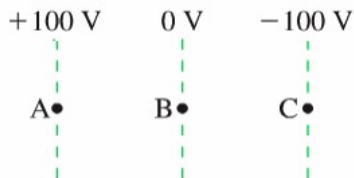
- 1% a) 2 respondents
- 2% c) 4 respondents
- 56% e) 94 respondents

- 33% b) 56 respondents
- 6% d) 10 respondents
- 2% No Answer 3 respondents

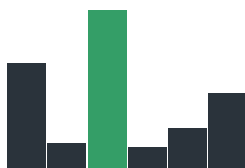
Attempts: 166 out of 169



An electron is released from rest at point B, where the electric potential is 0V. Afterward, the electron will



Correct answer
38% of your students correctly answered this question.



- 24% remain at rest at B. 41 respondents
- 38% move toward A at an increasing speed. 65 respondents
- 9% move toward C at an increasing speed. 15 respondents
- 2% No Answer 3 respondents

- 5% move toward A at constant speed. 9 respondents
- 4% move toward C at constant speed. 7 respondents
- 17% I don't know. 29 respondents