

Scratcher (IFAT) Forms for Conceptual Test Questions in Introductory Courses

July 29 2015

Nicole Ackerman

Agnes Scott College

IMMEDIATE FEEDBACK ASSESSMENT TECHNIQUE (IF AT®)
 Name _____ Test # _____
 Subject _____ Total _____
SCRATCH OFF COVERING TO EXPOSE ANSWER

	A	B	C	D	E	Score
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___
10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	___

Form# ED21 • © 2012 Epstein Educational Enterprises, Inc. U.S. Patent No. 6,210,171

USING IF-AT FORMS

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Form # E021 ● © 2012 Epstein Educational Enterprises, Inc. U.S. Patent No. 6,210,171

1st Choice

2nd Choice

3rd Choice

Wrong

Identification

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1st Choice

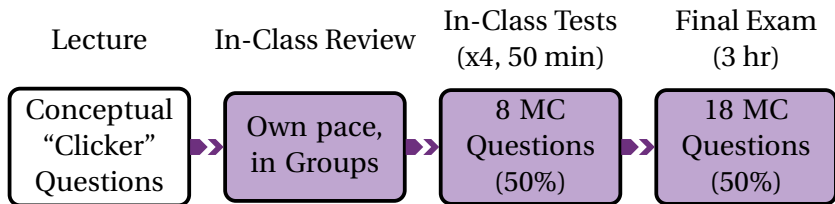
2nd Choice

3rd Choice

Wrong

Identification

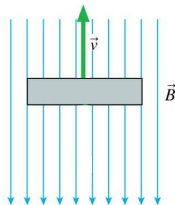
IMPLEMENTATION



MC = Conceptual Multiple Choice

EXAMPLE QUESTION

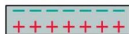
For the image shown to the right of a conducting bar moving in a magnetic field, which of the images below correctly represent the induced charge distribution?



A.



B.



C.



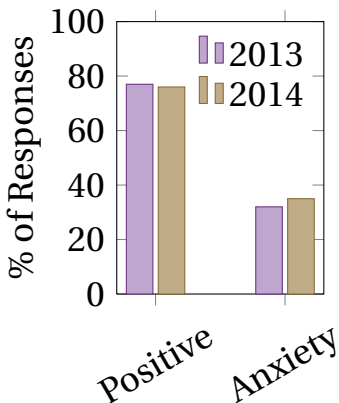
D.



E.

STUDENT FEEDBACK

HOW DOES THE USE OF SCRATCHERS IMPACT TEST ANXIETY?



“I like the scratchers a lot. I think it was very helpful because it prevented me from second guessing my answers, and I was able to move on ‘for good’ after using the scratcher.”

“The scratchers added a little bit of stress, but the benefit of them is worth it. It was good to have immediate feedback, and I like that there is an opportunity for partial credit on multiple choice questions.”

CORRELATION WITH “KNOWLEDGE”

DO SCRATCHERS PROVIDE BETTER ASSESSMENT OF PHYSICS KNOWLEDGE?

