

Sample question from ACEPhysics activity:

- A. Below is a sample of what might happen at the start of a run. The first row tells you Alice's bit, which corresponds to her sending a $|0\rangle$ or a $|1\rangle$ state. The second tells you whether she applied the Hadamard gate. Both the first and the second row are filled completely randomly. Given this information, fill out the third row with the state that actually gets sent to Bob.

Qubit #	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Alice's bit	0	0	0	1
Did Alice apply H?	N	Y	N	N
Alice sends...	Select... v	Select... v	Select... v	Select... v

- $|0\rangle$
- $|1\rangle$
- $|+\rangle$
- $|-\rangle$
- other

Check in! ↓