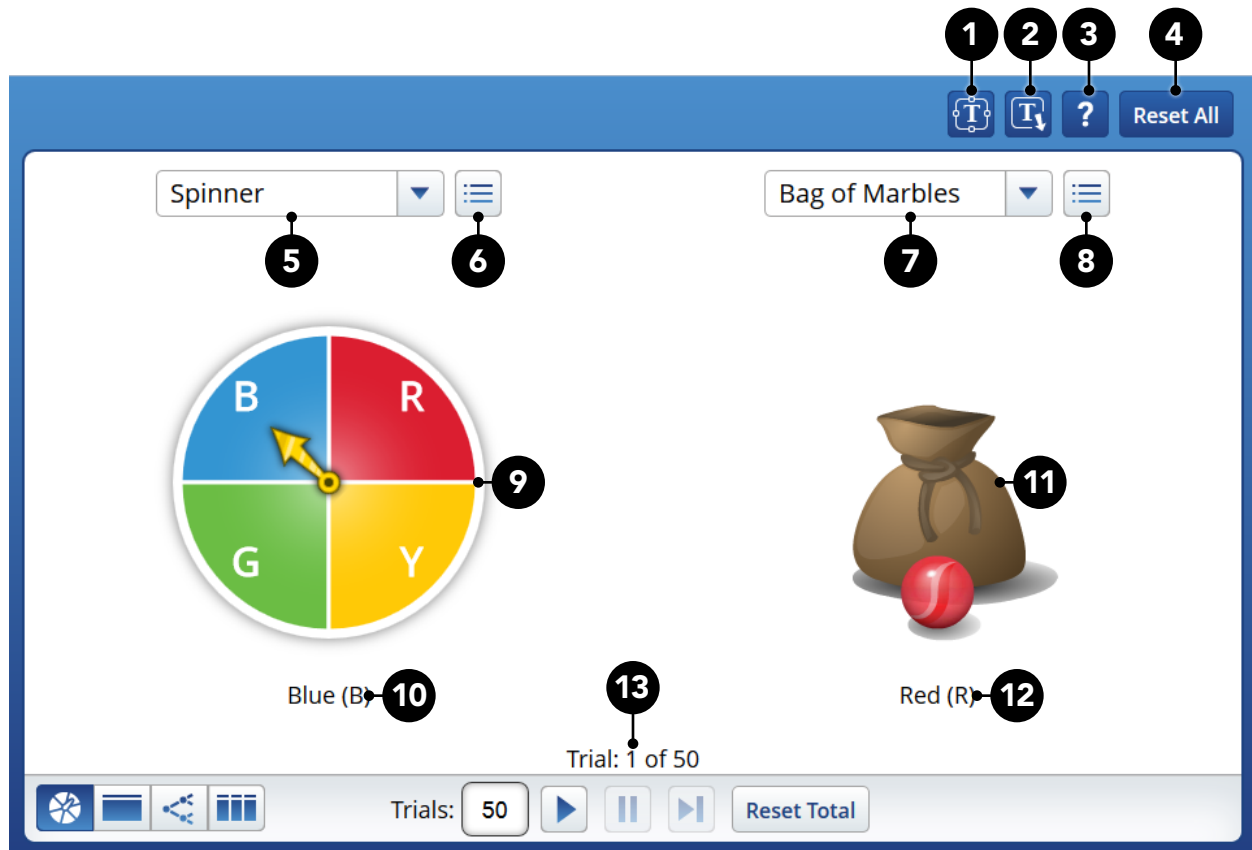


Probability Tool

In this tool, you can perform simulations using real-world objects. You can also compare the experimental and theoretical probability of a simulation.



- 1. Textbox** Add comments to the activity area.
- 2. Textbox with Arrow** Add comments to the activity area, using the arrow to focus attention on a particular area.
- 3. Help** Launch a help file PDF for the tool.
- 4. Reset All** Reset all current work in the activity area for the tool back to the default settings.
- 5. Random Event Generator Selection Menu 1** Select a Random Event Generator to run a simulation. You can choose a Coin, Spinner, Bag of Marbles, Deck of Cards, or Number Cube for your event generator.
- 6. Random Event Generator Options Menu 1** You can use the options menu to customize the possible outcomes of the chosen event generator.
- 7. Random Event Generator Selection Menu 2** Select a Random Event Generator to run a simulation. You can choose a Coin, Spinner, Bag of Marbles, Deck of Cards, or Number Cube for your event generator.

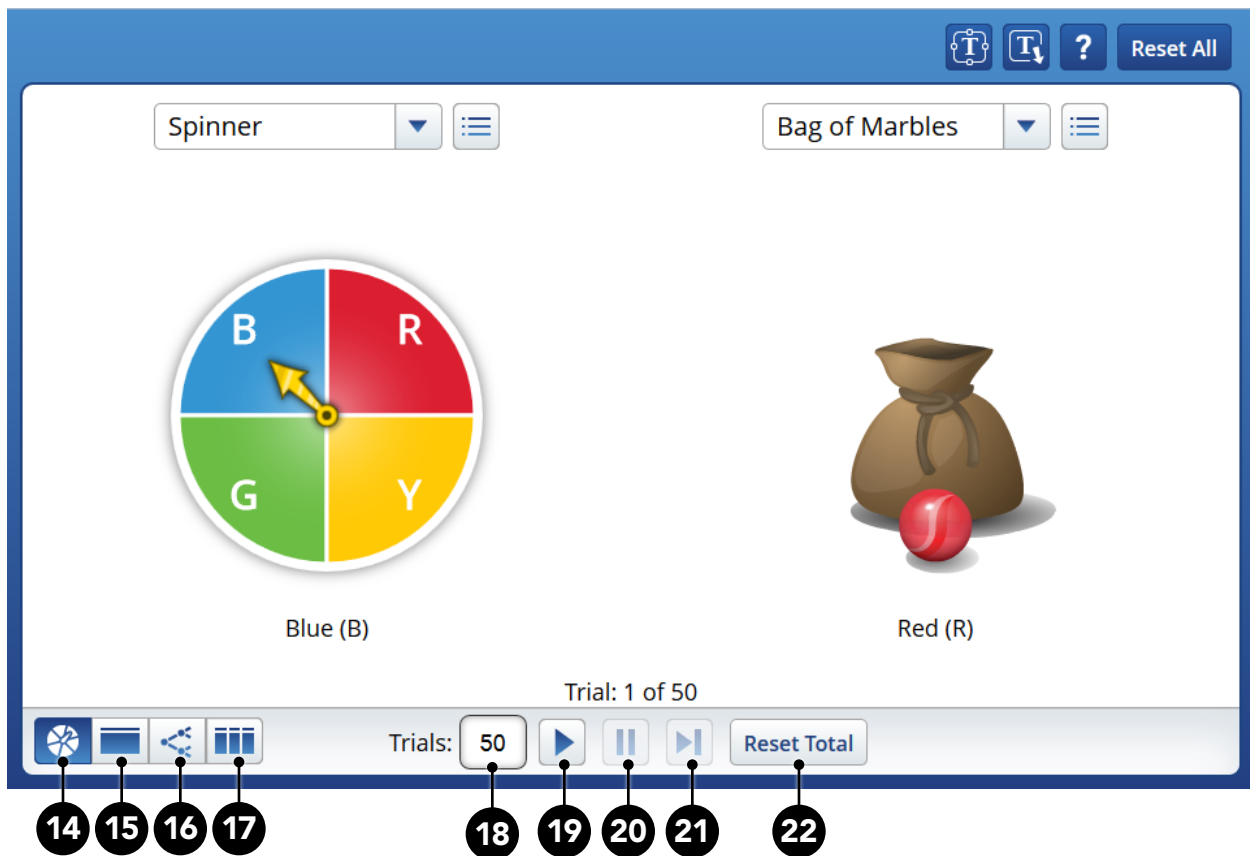
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Probability Tool

- 8. Random Event Generator Options Menu 2** You can use the options menu to customize the possible outcomes of the chosen event generator.
- 9. Random Event Generator 1** Once your event generator is chosen from the event menu, the event generator will appear. While a simulation is running, the event generator will show the outcome of the current trial in real time.
- 10. Random Event 1 Outcome** Shows the outcome of the last trial for the Event Generator 1.
- 11. Random Event Generator 2** Once your event generator is chosen from the event menu, the event generator will appear. While a simulation is running, the event generator will show the outcome of the current trial in real time.
- 12. Random Event 2 Outcome** Shows the outcome of the last trial for the Event Generator 2.
- 13. Trial Counter** Shows the current status of the simulation, including the total number of trials if the same event generators are used. You can run a maximum of 500 total trials using the same event generator(s).

(continued on the next page)

Probability Tool



14. **Random Event Generator View** Select the event generator(s) for a simulation and select options for running a simulation. As trials are run in real-time, you can see the outcomes of each trial.
15. **Experiment Table View** View the Count, Expected Count, Experimental Probability, and Theoretical Probability of each possible outcome for the selected options of the event generator(s). Updates as the trials run in real-time.
16. **Tree Diagram View** View the Tree Diagram of all possible outcomes for the selected options of the event generator(s). Each branch is selectable and will display the theoretical probability of each part and the final outcome.
17. **Event Table View** View the actual results of each trial in sequential order. Updates as the trials run in real-time.
18. **Trials Selection Area** Choose the number of trials for the selected event generator(s).
19. **Run Button** Once the event generators and number of trials have been chosen, the Run button will run a simulation of the number of trials specified in the Trials Selection Area.
20. **Pause Button** Will stop a simulation at the end of the current trial.
21. **Skip to End Button** Will run all the remaining trials of the current simulation instantaneously.
22. **Reset Total Button** Will reset the number of trials for the current simulation. Resetting the number of trials does not change the currently selected event generator(s).