Conduct repeated chance experiments and run simulations with a large...

conduct repeated chance experiments and run simulations with a large number of trials using digital tools; compare predictions about outcomes with observed results, explaining the differences

Learning intention

- conduct repeated chance experiments and run simulations with a large number of trials using digital tools; compare predictions about outcomes with observed results...

Teach and model

- developing an understanding of the law of large numbers through using experiments and simulations to conduct large numbers of trials for seemingly random events and...
- conducting simulations using online simulation tools and comparing the combined results of a large number of trials to predicted results

Check understanding

- Explain the main idea in conduct repeated chance experiments and run simulations with a large... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.