

Design and conduct repeated chance experiments and simulations, using digital...

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Learning intention

- design and conduct repeated chance experiments and simulations, using digital tools to compare probabilities of simple events to related compound events, and...

Teach and model

- using digital tools to conduct probability simulations that demonstrate the relationship between the probability of compound events and the individual...
- comparing experiments which differ only by being undertaken with replacement or without replacement
- conducting two-step chance experiments using systematic methods to list outcomes of experiments and to list outcomes favourable to an event

Check understanding

- Explain the main idea in design and conduct repeated chance experiments and simulations, using digital... 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.