Probability scales and simulations

Learn and practise | Free preview

A sample from this topic. The complete topic collection contains three different resources and worked solutions.

Show your thinking using words, working or a labelled drawing. Use the explanations and example first.

What you will practise

• Probability scales and simulations

• Explain and check an answer with an appropriate representation.

Useful starting skills: Use objects, drawings or a number line to explain a simple idea.

Start by listing what can happen and stating the chance model. A fair device has specified equally likely elementary outcomes; categories formed from those outcomes need not have equal chances.

Record trials systematically and compare frequencies. Chance experiments vary from run to run. Repeating more trials can reveal a pattern, but it does not guarantee a particular next outcome or exact total.

Worked example

A bag contains 6 red and 2 blue identical counters. Which colour is more likely?

There are more red counters among the eight equally selectable counters.

Red is more likely, but blue can still occur.

Answer: Red

Try it yourself

Name: _____ Date: _____

1. A bag has 3 red and 5 blue identical counters. FindP(red) as a fraction, decimal and percentage.

2. A fair die is rolled. FindP(number greater than 4).

Answers and explanations

Check the method as well as the final answer. An alternative correct method is also valid.

1. $3/8=0.375=37.5\%$

Three favourable counters out of eight equally selectable counters.

2. $2/6=1/3$

The favourable outcomes are 5 and 6.

Curriculum reference: VC2M6P01; VC2M6P02

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