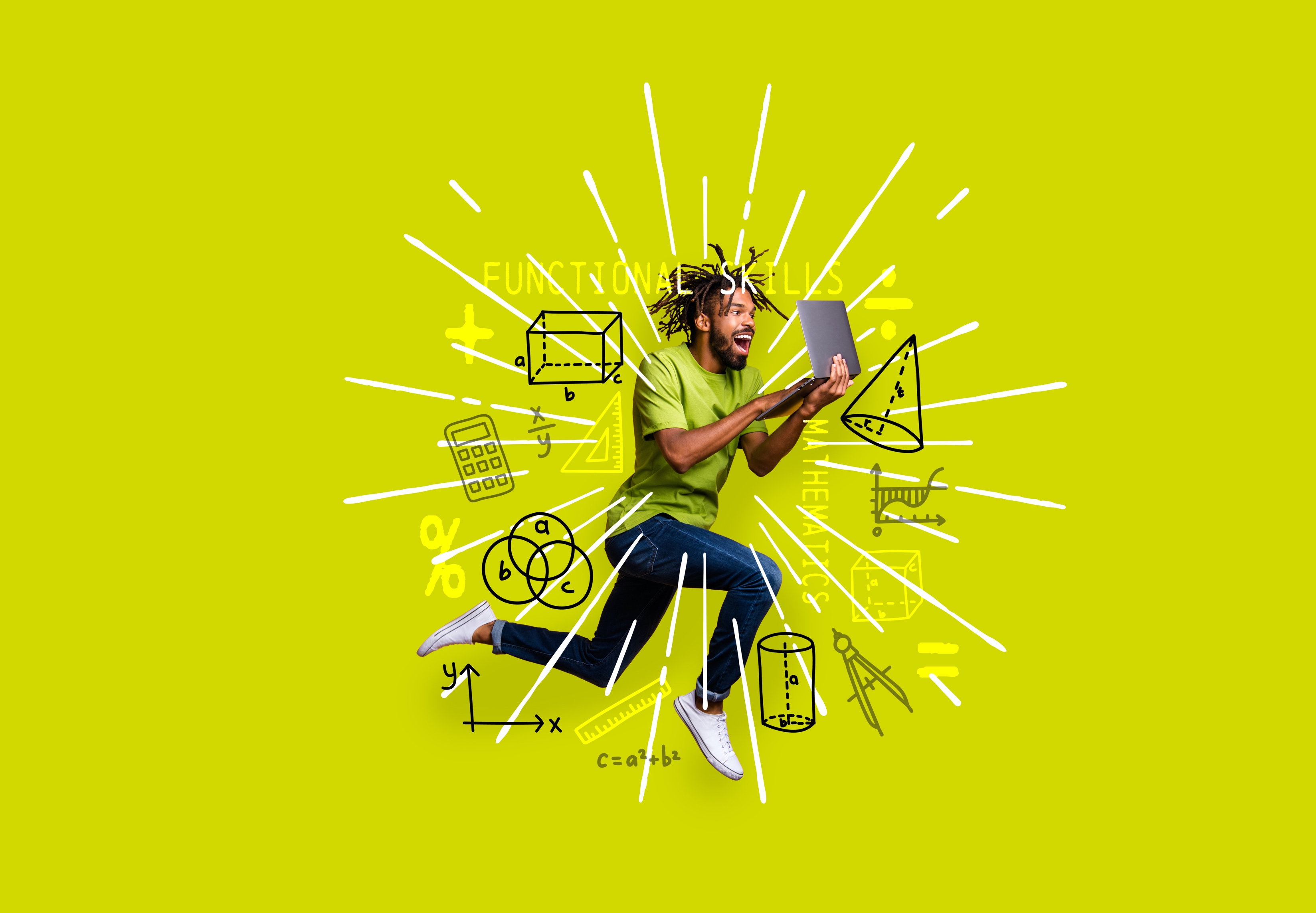
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**FUNCTIONAL SKILLS**

Maths Level 2



**Probability**

Probability is calculating how likely an event is to happen.

If something has a low probability, it is unlikely to happen. If something   
has a high probability, it is likely to happen.

Probabilities are always shown as fractions, decimals, or percentages.

**Formula**

**Using the formula provided to work out the answers to the following questions.**

**Question 1**

Work out the probability of selecting a vowel from the word **HIGHFIELD**.

(Show your working out)

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**Question 2**

A bag contains 12 different colour counters: **5 red, 4 white, 2 blue and 1 pink.**

What is the probability of selecting a blue counter?

(Show your working out)

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**Question 3a**

What is the probability of rolling an **ODD** number when you roll a die?

Show your answer as a fraction.

(Show your working out)

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**Question 3b**

Write your answer to question 3a as a decimal.

(Show your working out)

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**Question 3c**

Convert your answer to question 3b into a percentage.

(Show your working out)

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**Question 4**

What is the probability of selecting a red card from a deck of 52 cards?

(Show your working out)

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**Question 5**

What is the probability of selecting a picture card from a deck of 52 cards?

Show your answer as a decimal.

(Show your working out)

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A probability line is the simplest way of displaying your results**  This is a probability scale. You can mark a point along this scale to demonstrate a probability’.  **0.9**  **0.8**  **0.7**  **0.6**  **0.4**  **0.3**  **0.2**  **0.1**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **0** |  |  | | |  | | | **0.5** |  | |  | |  | **1** | | **Unlikely** |  | |  |  | |  | **Even** | |  |  | |  |  | **Likely** | |

**Question 6**

What is the probability **and** likelihood of tossing a coin and it landing on heads? Show your answer on the probability line.

(Show your working out)

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**Question 7**

How likely is it that you will roll a 4 when rolling a 6-sided die?

(Show your working out)

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**Exam-style question 1**

Linda has a box full of handmade cards that she is taking to a craft fair.

The table shows how many cards in each of the categories Linda has.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Birthday** | **Thank you** | **New job** | **Graduation** | **New home** |
| **Number  of cards** | 85 | 41 | 22 | 105 | 25 |

Linda picks a card from the box at random.

What is the probability that Linda picks out a Thank you card from the box?

Show your answer as a decimal.

(Show your working out)

|  |
| --- |
|  |

Convert your answer to a percentage.

(Show your working out)

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**Exam-style question 2**

You work as a driver for Highfield Transport.

When Highfield Transport gets busy, it offers overtime to a driver.

There are 5 drivers at Highfield Transport. The probability of there being overtime available in any given week is ¼.

The driver allocated overtime is chosen at random.

What is the probability of you being allocated overtime next week? Give your answer as a fraction AND a percentage.

(Show your working out)

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