The skills in this series of exercises appear frequently.

These are the GIFTS you must take to succeed.

## Numeracy Unit

## Exercise 6

## Expected Frequency (Calculator)

Calculate the following:

- 1. The probability a team wins a match is 0.32. How many are wins are expected from 20 matches?
- 2. The probability an office worker will catch a bug is 0.04. How many in an office of 60 employees are expected to catch the bug?
- 3. The probability of snow on a December day in Airdrie is 0.27. How many days of snow are expected?
- 4. The probability of a Ryanair flight arriving on time is 0.34. How many of their 38 flights into Edinburgh airport are expected to arrive on time?
- 5. The probability of a pupil wearing a tie is 0.86. How many of 560 are expected to be wearing a tie?
- 6. The probability of a damaged egg in a batch is 0.08. How many of 30 dozen are expected to be damaged?
- 7. The probability a salesman signs up a customer outside Tesco is 0.012. How many customers would they be expected to sign up from 600 customers?
- 8. The probability that a pupil in Brannock High will have full attendance is 3.2%. How many from 586 pupils are expected to have full attendance?
- 9. 24 of 42 National 5 pupils achieved an A grade last session. How many of 50 pupils are expected to get an A grade this year?
- 10. The probability of a parcel going missing in transit is 0.054. How many of 140 parcels are expected to be lost in transit?

## **Applying Question**

A broadband provider claims it will only drop below 30mbps download speed 0.0138 days in a year.

In 2023 there were 6 days where it dropped below 30mbps.

Determine if this is more or less than expected.

