# Theme: busters (Physics, Chemistry, Biology)

# Learning objective:

10.4.1 - understand main points in extended texts on a wide range of familiar and some general and curricular topics;

10.4.3 - skim a range of lengthy texts with speed to identify content meriting closer reading on a range of general and curricular topics;

#### we only use 10% of our brains

Your brain weighs just 1½ kg (about 2% of your body's weight), but uses around 20% of the oxygen you breathe. It contains billions of neurons that are constantly sending and receiving information. Yet people still say that you only use one tenth of it. This myth possibly comes from William James, a psychologist. In 1908, he claimed that, "We are making use of only a small part of our possible mental and physical resources." Journalists may

have misunderstood him and the 10% myth was born. If we take a brain scan, though, we see that we use all the parts of our brains, just not at the same time. So whoever repeats this myth is certainly not using enough of theirs.

### An apple fell on Newton's head

Here's a myth that is almost true. Sir Isaac Newton, the 17th century mathematician, astronomer and physicist, under an apple tree in his garden. Out of the blue, an apple fell on his head and he **immediately** came up with the theory of gravity. It is one of the most famous images in the history of science, but it might not have happened. Documents written at the time suggest that Newton did come up with his theory from observing falling apples, but one probably did not **hit** him on the head. It's possible that Sir Isaac was the one who

#### we only use 10% of our brains

Your brain weighs just 1½ kg (about 2% of your body's weight), but uses around 20% of the oxygen you breathe. It contains billions of neurons that are **constantly** sending and receiving information. Yet people still say that you only use one tenth of it. This myth **possibly** comes from William James, a psychologist. In 1908, he claimed that, "We are making use of only a small part of our possible mental and physical resources." Journalists may



have misunderstood him and the 10% myth was born. If we take a brain scan, though, we see that we use all the parts of our brains, just not at the same time. So whoever repeats this myth is certainly not using enough of theirs.

## An apple fell on Newton's head

Here's a myth that is almost true. Sir Isaac Newton, the 17th century mathematician, astronomer and physicist, was sitting under an apple tree in his garden. Out of the blue, an apple fell on his head and he **immediately** came up with the theory of gravity. It is one of the most famous images in the history of science, but it might not have happened. Documents written at the time suggest that Newton did come up with his theory from observing falling apples, but one probably did not hit him on the head. It's possible that Sir Isaac was the one who

invented the story, because, let's be **honest**, it is a great anecdote!

## Word formation: Negative verbs

- 5 10.5.2 Read the theory. Then complete the sentences using the word in bold with the correct prefix and in the correct form.
- 're' means 'again'. Nurasyl must retake his Physics test.
- 'mis' means 'wrong'. I don't want you to misunderstand so let me explain better.
- 'un' means 'not'. I'm sorry, but David is unable to answer the phone right now.
- 'dis' means 'the opposite'. Why do you dislike maths so much?
- 5 The children ..... and their mother got very angry. (BEHAVE)

### Sneaking