Unit 4 Multisensory perception

Name .....
Class .....
Date .....

Start thinking

1 Answer the questions.

1 What are the five senses? Which parts of the body are they associated with?

.....

2 Give two examples of activities we need each of the senses for. Are there any activities we use more than one sense for? Which ones?

.....

3 What kind of problems can people have if one of their senses fails? What can they do to cope?

.....

Comprehension check

2 Watch the video. Choose the correct answers.

1 Today, scientists have better ... than they did in the past.
a colleagues b qualifications c equipment

2 Professor Charles Spence and his team are currently studying the relationship between
a hearing and taste. b hearing and vision. c vision and taste.

3 There aren't many things in life that stimulate
a more than one sense. b only one sense. c most of the senses.

3 Watch the video again. Correct the factual errors in the sentences.

1 Scientists have made no progress in understanding the brain recently.

.....

2 In the past, scientists believed that different senses affected the same part of the brain.

.....

3 Professor Spence is a radiologist who studies multisensory perception.

.....

4 Products around us tend to stimulate all of the senses.

.....

5 People generally associate 'sweet' with the sound of a guitar.

.....

6 'Bitter' is associated with high-pitched sounds.

.....

7 According to Professor Spence, one of our most multisensory experiences is the perception of drinks.

.....

8 The professor uses a box as an example of tactile perception.

.....

4 Complete the summary. Write a word in each gap.

Developments in neuroimaging technology have enabled scientists to learn more about the [1] ..... One of the most surprising discoveries they have made is that the [2] ..... do not stimulate isolated areas of the sensory cortex. Instead, one sense often stimulates an area that usually deals with a different sense, because of a phenomenon known as multisensory [3] ..... Scientists like Professor Charles Spence are currently doing a lot of [4] ..... into this area. They are currently focusing on the sense of [5] ..... and examining how this is affected by the other four senses. Their latest experiment involves giving people a smell or a flavour and asking them to associate it with a musical note and an [6] ..... Professor Spence and his team are particularly interested in how multisensory perception is used in our [7] ..... The findings of their research are used by different companies to design the right kind of [8] ..... for their products.

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Vocabulary

6 Rewrite the sentences. Replace the words in bold with one of the adjectives below, making any other necessary changes.

■ applicable ■ bizarre ■ brassy ■ contradictory ■ intriguing ■ ongoing ■ sensory ■ tactile

1 Bitter tastes are generally associated with **loud and unpleasant** sounds.

.....

2 Professor Spence's work, which is **still in progress**, is related to the mixing of the senses.

.....

3 Some of Professor Spence's experiments sound a little **weird**.

.....

4 When researchers are faced with **conflicting** findings, they have to find an explanation for the disparity.

.....

5 Many scientists regard multisensory perception to be a **fascinating** area of research.

.....

6 According to Professor Spence, multisensory perception is **relevant** to all walks of life.

.....

7 The **neural** processes carried out in the brain affect the way we perceive absolutely everything.

.....

8 It isn't only the visual appearance of packaging that is important, but also its **touchable** properties.

.....

7 Complete the text with the correct form of the words in brackets.

In addition to his research into the [1] ..... (connect) between hearing and taste, Professor Spence has also been looking into the effect of vision on taste. The [2] ..... (find) of his research show that vision is just as important as smell when it comes to the [3] ..... (perceive) of flavours. The psychologist has done many experiments to gain an [4] ..... (understand) of how colour can affect flavour, one of which involved a group of people who were given some steaks to eat. Since it was dark, the people had no [5] ..... (rely) information as to the colour of their steak, so they all thought it was normal. However, once the lights were turned on to reveal the steaks had been dyed blue, many of them ran to the bathroom. This shows that there is a certain degree of [6] ..... (correspond) between colour and flavour, as flavour is affected by how the food has been [7] ..... (vision) perceived. Unless we find a dish [8] ..... (appeal) to look at, we are unlikely to relish the experience of eating it.

<u>Homework: According to the questions prepare a short verbal presentation:</u>

Describe your favourite food in relation to each of the senses. What is it about the food that appeals to you? Which sights, sounds, smells or tastes trigger a childhood memory for you? Describe the memory in as much detail as you can.

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