



### Student worksheet

# 3.1 Receptors detect stimuli

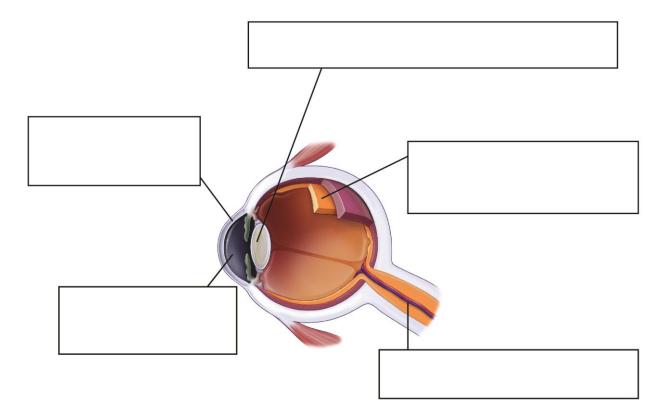
Pages 42-45 and 188

# **Sensory organs**

Name:

- 1 How are stimuli and receptors related to one another?
- 2 What are the 5 primary sense organs?
- 3 Label the structures and explain their function on the diagram of the eye below and, using a red pen, draw the path that light takes through the eye.

Class:



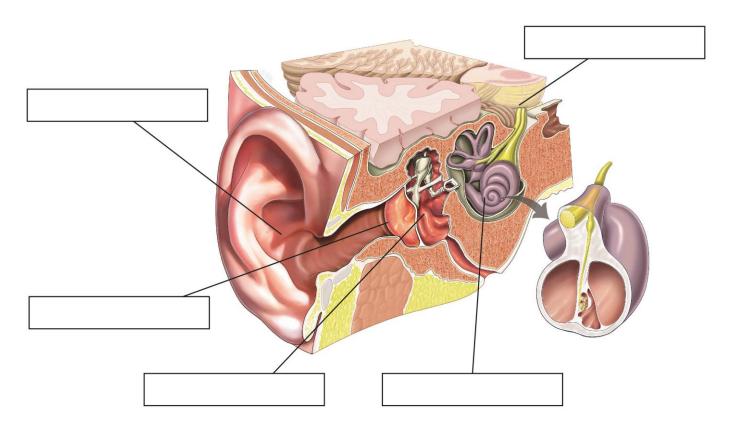
- 4 What is sound made up of?
- 5 How does the ear detect and interpret sound and transfer it to the brain? You must mention structures and their functions.

Class: Name:





Label the following diagram of the ear and, using a red pen, draw the path that sound takes from the ear to the brain.



| 1 | what is the common misconception regarding taste and the tongue? |
|---|------------------------------------------------------------------|
|   |                                                                  |
|   |                                                                  |

What does the ability to detect smell rely on?

| 9 | How does the nose detect and interpret smell and transfer it to the brain? You must mention structures |
|---|--------------------------------------------------------------------------------------------------------|
|   | and their functions.                                                                                   |
|   |                                                                                                        |

- What stimuli can the skin detect?
- Which sense organ is able to tell the human body more about the world than any other?

Class:



# **Extend your understanding**

Name:

| 12 | In the following situations, state the stimulus, the stimulus organ, and the response. |                                                          |  |  |  |
|----|----------------------------------------------------------------------------------------|----------------------------------------------------------|--|--|--|
|    | а                                                                                      | Heather takes off her jumper on a hot day.               |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    | b                                                                                      | Arthur steps on a pin.                                   |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    | С                                                                                      | Rachel's mum turns on her bedroom lights to wake her up. |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    | d                                                                                      | Tana eats a sour lolly.                                  |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    | е                                                                                      | Robbie walks by some old and rotting fish.               |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    |                                                                                        |                                                          |  |  |  |
|    |                                                                                        |                                                          |  |  |  |