

AQA, OCR, Edexcel

GCSE Science

GCSE Biology

Human Defence Response
Answers

Name:

M

M

E

Mathsmadeeasy.co.uk

Total Marks: /18

Visit <http://www.mathsmadeeasy.co.uk/> for more fantastic resources.

Q1: Define what is meant by the human defence response.

A= How we stop bacteria/ pathogens from entering the body.

(1 mark)

Q2: Describe how the skin can defend against pathogens.

A= Accept any 2 of the following:

- Barrier
- Secretions
- Scab/ Clots
- Microorganisms – own naturally occurring

(2 marks)

Q3: Explain how washing your hands can prevent the spread of disease.

A= Washes pathogens from skin surface.

(1 mark)

Q4: How can the respiratory system defend against pathogens?

A= 1 mark – Trap particles

1 mark for any of the following:

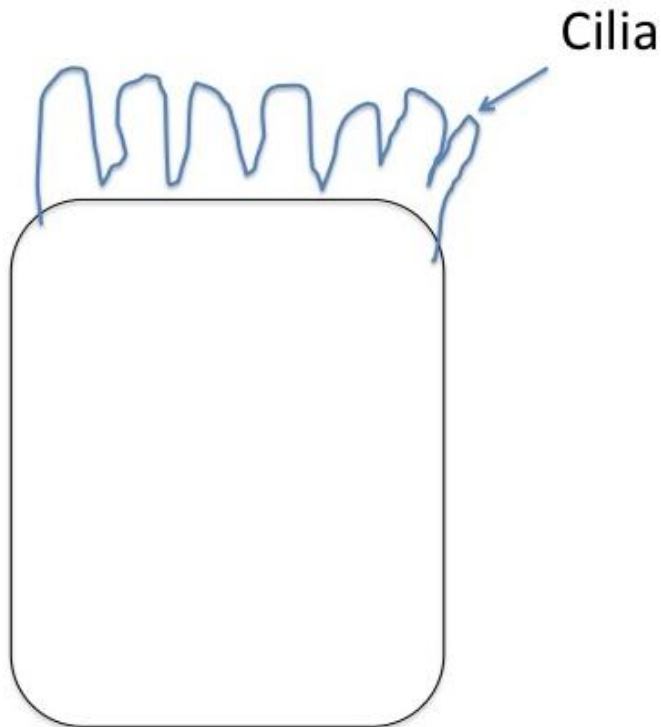
- Mucus
- Cilia
- Nasal hairs

(2 marks)

Q5: Cilia are present in the lungs and beat together to move mucus through the lungs.

Draw and label a cilia cell.

A= 1 mark for drawing/ 1 mark for labelling cilia.



(2 marks)

Q6: Explain how the stomach is adapted to defend against pathogens.

A= Production of stomach acid

(1 mark)

Q7: Clotting is a vital part of the immune system defence to pathogens. Explain the effects on defence seen in those that cannot clot blood effectively.

A= Allows entry point in skin/ Breach 1st line of defence.

(1 mark)

Q8: What is an autoimmune disease?

A= Body attacks / Destroys its own tissues.

(1 mark)

Q9: Discuss the ways white blood cells protect against pathogens and how.

A= 3 marks for ways/ 3 marks for how:

- Inject microorganisms
 - Digest
 - Kill
- Produce antibodies
 - – Target particular pathogens
 - Prevent secondary infection
- Produce antitoxins – cancel out toxins

(6 marks)

Visit <http://www.mathsmadeeasy.co.uk/> for more fantastic resources.

Q10: Explain how antibodies fit to one particular pathogen.

A= Complementary shape.

(1 mark)