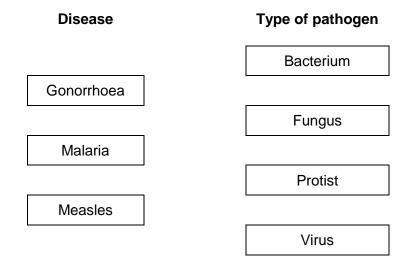
Biology unit 3 homework – Infection and response For each of the questions below: -

Highlight the command word if there is one & annotate what the command word means. - Answer the question!

- **Q1.** Pathogens cause infectious diseases in animals and plants.
- (a) Draw **one** line from each disease to the type of pathogen that causes the disease.



(3)

# Q2.

The body defends itself against pathogens.

(a) Give three ways that white blood cells defend the body against pathogens.

Tick (✓) three boxes.

Ingest pathogens

Produce antibiotics

Produce antibodies

Produce antibodies

Produce antibodies

Produce antitoxins

Produce vaccines

Stop pathogens entering the body

#### Biology unit 3 homework – Infection and response

For each of the questions below: -

Highlight the command word if there is one & annotate what the command word means. - Answer the question!

(b) Bacterial infections can be treated with antibiotics.

Sometimes bacteria are resistant to antibiotics.

What does resistant to antibiotics mean?

#### Q3.

New drugs have to be tested before they can be sold.

(ii) During **Phase 1** clinical trials, the drug is tested on healthy volunteers using low doses.

Draw a ring around the correct answer to complete the sentence.

find the best dose.

see if the drug works.

The reason for **Phase 1** testing is to

see if the drug has side effects.

(1)

(iii) During **Phase 2** and **Phase 3** clinical trials, half of the volunteers are given a fake drug called a placebo in a double blind trial.

In a double blind trial, who knows which volunteers are given the drug and which volunteers are given the placebo?

Tick ( ✓) **one** box.

	Tick ( 🔨 )
The doctors but not the volunteers	
The doctors and the volunteers	
The volunteers but not the doctors	
Neither the volunteers nor the doctors	

## Biology unit 3 homework – Infection and response For each of the questions below: -

Highlight the command word if there is one & annotate what the command word means. - Answer the question!

## Q4.

(c)

(c) After the outbreak began, drug companies started to develop drugs and vaccines for EVD.

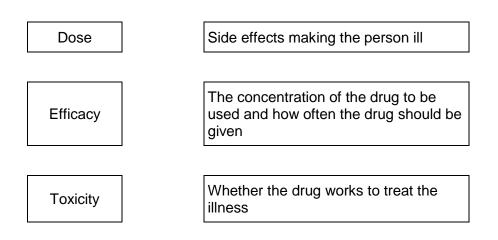
A drug has to be thoroughly tested and trialled before it is licensed for use.

Testing, trialling and licensing new drugs usually takes several years.

Draw **one** line from each word about drug testing to the definition of the word.

### Word about drug testing

### Definition



**Q5.** Pathogens are microorganisms that cause infectious disease.

(b) One way the human body protects itself against the entry of pathogens is by producing antimicrobial chemicals.

Antimicrobial chemicals kill pathogens.

Give two other ways the human body protects itself against the entry of pathogens.

1	
2	
۲	
Measles is a childhood disease caused by a microorganism.	
Measles is <b>not</b> treated by antibiotics.	
Give the reason why.	

(1)

#### **Biology unit 3 homework – Infection and response**

For each of the questions below: -

Highlight the command word if there is one & annotate what the command word means. - Answer the question!

### Q6.

(b)

Q8.

Pathogens are microorganisms that cause infectious diseases.

Between 1750 and 1850 vaccinations were also developed. (i) What is in a vaccine?

			Tick (✔) <b>one</b> k	DOX.						
			large amounts	of dead pathoge	ns					
			large amounts	of live pathogens	3					
			small amounts	s of dead pathoge	ns		(1)			
b)	Antib	oiotics	were develope	d in the 1940s. Ar	ntibiotics kill bad	cteria.				
(i) Which <b>one</b> of the following is an antibiotic?										
	Draw a ring around the correct answer.									
			chol	esterol	penicillin	th	alidomide	(1)		
Q7										
	The I	MMR	vaccine is used	l to protect childre	n against meas	les, mumps ar	nd rubella.			
	(a)	Com	Complete the sentences about vaccination.							
		Vaccines stimulate white blood cells to produce								
		This	makes children	l			to the pathogen.			
28.	Bacte	eria a	nd viruses can	reproduce quickly	inside the body	v and make pe	ople feel ill.	(2)		
	(a)									
		a	Intibodies	antitoxins	toxins					

Bacteria and viruses make us feel ill because they produce \_\_\_\_\_

(1)

.