

Name:

1 List six places around us where microbes are present.

a

b

c

d

e

f

...../6

2 Tick the five true sentences from Chapter One.

1 In humans, most bacteria live in our noses and throats.

2 Some viruses are about 10,000 times smaller than a piece of salt.

3 Viruses only cause dangerous diseases like AIDS or COVID-19.

4 Viruses can only live if they enter the living cells of humans, plants, animals or bacteria.

5 Viruses can live for some time on our clothes, on a door handle or on a coin.

6 Pathogens from one sneeze could travel up to 160 kilometres an hour.

7 Many of the viruses we know actually come from animals or insects.

8 Incubation periods of viruses are the same for everyone.

...../5

3 Put the information about the common cold and the flu in the correct column.

it develops slowly	it will hit you immediately	symptoms are stronger
you can continue working or going to school		symptoms are quite mild
you won't have enough energy for work or school		you won't have a fever
you have a dry cough	you have a mucus cough	you will have a fever above 38°C

Common cold	The flu

...../10

4 For each question choose the correct answer, A (Anwar), B (Lucas) or C (Mia).

- 1 Who had a swollen neck and throat? **A B C**
- 2 Who had red spots on the chest, face and back? **A B C**
- 3 Who had white spots in the mouth? **A B C**
- 4 Who had a mild fever? **A B C**
- 5 Who still wanted to eat? **A B C**
- 6 Who was not hungry? **A B C**

...../6

5 Choose the correct answers (a, b, c or d) about Chapter Three.

- 1 What is another name for norovirus?
 - a Baby flu.
 - b Northern flu.
 - c Summer cruise bug.
 - d Winter sickness bug.

2 Which of these statements is not true about norovirus?

- a** It can survive high temperatures.
- b** It commonly causes vomiting and diarrhoea.
- c** It usually lasts for a very long time.
- d** There are about 50,000 child deaths a year from it.

3 When did the last person catch smallpox?

- a** In Ancient Egyptian times.
- b** In 1967.
- c** In 1977.
- d** In 1980.

4 Which of these statements is true about polio?

- a** It can be cured.
- b** It can be transmitted by coughing and sneezing.
- c** It is still a very common disease today.
- d** Most people die from polio.

5 Who are worst affected by the disease Ebola?

- a** Children.
- b** Men.
- c** Teenagers.
- d** Women.

6 What is the main symptom of SARS?

- a** Difficulty in breathing.
- b** Muscle pain.
- c** Paralysis.
- d** Very high fever.

...../6

6 Answer the questions about COVID-19.

1 When were the first cases of COVID-19?

.....

2 Where were they discovered?

.....

3 By July 2020, how many countries in the world had cases of COVID-19?

.....

4 How is it transmitted?

.....

5 What can the symptoms be?

.....

6 Who is worst affected by the virus?

.....

...../6

7 Complete the text. Choose from the sentences (a–h) below. There are three extra sentences.

The important thing to understand when we talk about treatment is that it is extremely difficult to treat viral infections. ¹..... First of all, there are so many of them. Also, unlike bacteria, viruses cannot survive alone – they “hide” inside a host cell and it is difficult to find them without destroying the host cell. ²..... Different viruses also have different nucleic acid – DNA or RNA – and some have very different shapes and are always changing or mutating. So, while it is possible to use the same medication for different bacterial infections, a new drug is usually needed to treat each new virus.

³..... Doctors will prescribe a cream for the rashes to stop a patient from scratching, medicine for a sore throat, something to stop a runny nose or painkillers to bring down a fever. There are medications that can stop us from feeling sick and vomiting and tablets that will stop diarrhoea. ⁴.....

Doctors will advise patients to drink lots of water to avoid dehydration and drink soup and have plenty of rest to help build their immune system. If the symptoms are mild, the patient may not even need any treatment.

It is now possible to treat some viruses with what we call antiviral drugs, but not many. ⁵..... Some even prevent the virus entering the host cell. If a patient has a virus and a bacterial infection at the same time, they may need to take antivirals and antibiotics.

- a And they are not connected to each other.
- b An antiviral drug is a medicine that stops the virus from developing in the body.
- c But this is not generally very effective.
- d However, parents need to be careful as some of the treatments cannot be given to babies and very young children.
- e Nobody really understands why this is the case.
- f There are several reasons for this.
- g We generally treat the symptoms, like headaches, rashes and vomiting, but not the virus itself.
- h When there are no other alternatives, this kind of treatment is considered.

...../5

8 Circle the correct words to complete the text.

Preventing and controlling infection is one of the ¹ **least** / **most** important subjects for anyone working in health. While it is ² **impossible** / **possible** to prevent all viruses from spreading in hospitals, research tells us we ³ **can** / **can't** stop most of them. However, this is only possible if there ⁴ **are** / **aren't** strict rules that everyone follows. These rules are so strict that in many countries, if hospital workers ⁵ **follow** / **don't follow** them, it becomes a problem of law.

So how do nurses and doctors help prevent infection from ⁶ **leaving** / **spreading** as they work? ⁷ **First** / **Last**, they need to understand the different causes of infection – bacteria, viruses, etc. – and how they are transmitted. Then, it is important to know the symptoms of infection as well as which patients are most likely to become infected. And ⁸ **after** / **finally**, the different ways of preventing infection.

...../8


9 Complete the rules for washing your hands from Chapter Four.

Use ¹ water and liquid ²

Washing the ³ and between the ⁴

Not touching the ⁵ after you have finished washing.

Washing your hands for ⁶ than you think.



...../6

10 Match the dates with the events. Draw lines between them.

- 1796 a The “Polio Pioneers” were part of an experiment to test the safety of the vaccine.
- 1800 b The MMR vaccine was developed to protect against mumps, measles and rubella.
- 1853 c Edward Jenner developed a safer vaccine for smallpox.
- 1954 d 100,000 people had been vaccinated against smallpox in Europe.
- 1969 e A UK law was introduced so that all babies had to have the smallpox vaccine.

...../5

11 Match the jobs in the box with the facts about them.

pharmacists doctors nurses epidemiologists virologists

- 1 They are researchers whose main job is to study the science behind viruses.
- 2 They look at how and where outbreaks of a disease first begin and how they spread.
.....
- 3 They understand viruses and can advise patients on the right kind of medication for their symptoms.
.....
- 4 They diagnose viruses and then prescribe different types of treatment.
- 5 They organize vaccination programmes and can discover new outbreaks of viruses.
.....

...../5

12 Write *Barré-Sinoussi*, *Gita Ramjee* or *June Almeida*.

- 1 developed a special technique to identify viruses which were extremely difficult to see, even under a microscope.
- 2 died in March 2020 during the COVID-19 pandemic.
- 3 discovered that AIDS was transmitted by the human immunodeficiency virus or HIV.
- 4 identified a new type of virus, the coronavirus.
- 5 was given the Nobel Prize in Physiology or Medicine in 2008 with another scientist.
- 6 worked with sex workers in South Africa, trying to prevent them catching HIV-AIDS.

...../6

13 Put the events from Chapter Six in the correct order (1–5).

- a The bubonic plague returned to Europe on ships carrying goods for trade.
- b The Great Plague of London took place, killing around a quarter of the population of London.
- c The HIV/AIDS virus arrived, bringing fear to some populations across the world.
- d The Justinian Plague killed tens of millions of people across France, Spain, Germany and the UK.
- e The Spanish flu appeared in the US, Europe and Asia at around the same time.

...../5

14 Correct the sentences about Chapter Six.

1 The cause of the plague was a bacteria called Yersinia pestis carried by fleas that lived on cats.

.....

2 The plague was called “the Black Death” because the patient’s eyes turned black before they died.

.....

3 A black circle was painted on infected people’s doors to show the house was under quarantine.

.....

4 Like the bubonic plague, the Spanish flu was spread by a virus.

.....

5 Fewer US soldiers died from the Spanish flu than died fighting in the First World War.

.....

6 The HIV virus transferred to humans after meat from a type of bat was eaten.

.....

...../6

15 Complete the lists. Put the words from the box into the correct categories.

long journeys on public transport better house dangerous job healthier food
money for medication and hospital treatment many people living together

Higher salary:

.....

.....

Lower salary:

.....

.....

...../6

16 Complete the text. Choose one word (a, b, c or d) for each gap.

The plague in Florence, Italy

One of the first examples of a good public health policy was ¹ the time of the plague in Italy in the 17th century. When the plague arrived in Florence in 1630, the public health organization introduced several ² to help protect the people of the town. Part of the policy was to help feed the poor by giving them bread, meat, vegetables, rice and cheese for free. And to stop people from ³ in large groups and spreading the disease, schools, shops and bars were closed for forty days. ⁴ who broke the law was either sent to prison or had to pay a sum of money. According to reports at the time, these public health policies ⁵ a success. One in eight people died in Florence during this outbreak of the plague; a number that was far lower than in other towns in Italy where people ⁶ continued to live normal lives.

- | | | | |
|---------------------|--------------------|--------------------|---------------------|
| 1 a after | b before | c during | d while |
| 2 a policies | b policy | c political | d politician |
| 3 a met | b meet | c meeting | d to meet |
| 4 a Anyone | b No one | c None | d Someone |
| 5 a has been | b have been | c was | d were |
| 6 a has | b had | c was | d were |

...../6

17 Answer the questions about Chapter Seven. Choose numbers from the box.

\$5 three days hundreds of thousands of people 15,000 people in 1918 twelve

- 1** When did the Spanish flu arrive in the US?
.....
- 2** How much were people made to pay in San Francisco if they didn't wear a mask?
.....
- 3** How many people attended a big party to support the war in Philadelphia?
.....
- 4** In how many days did 635 people die in Philadelphia following the party?
.....
- 5** How many people had lost their lives in Philadelphia by March 1919?
.....
- 6** How many new viruses have been discovered in the UK during the last ten years?
.....

...../6

18 Match the two parts of the sentences. Draw lines between them.

- | | |
|--|--|
| <p>1 Being prepared and learning from past events</p> <p>2 Taiwan learned from</p> <p>3 When the COVID-19 virus arrived in 2020,</p> <p>4 Any passengers coming from infected countries</p> <p>5 It has been noted that these policies</p> <p>6 What is clear is that scientists need to work closely with governments</p> | <p>a helped keep the numbers of people infected by COVID-19 in Taiwan low at that time.</p> <p>b in order to develop policies to fight against these new viruses.</p> <p>c is extremely important for public health.</p> <p>d Taiwan began taking the temperature of passengers arriving from other countries at ports and airports.</p> <p>e the SARS and MERS outbreaks in 2003 and 2015.</p> <p>f were immediately quarantined.</p> |
|--|--|

...../6

19 Read the answers and complete the questions with the correct question words.

- 1** was the Chagas disease named after?
Carlos Chagas, the Brazilian doctor that discovered it.
- 2** town was norovirus named after?
A town of Norwalk in Ohio where, 150 children from one school became extremely ill in 1968.
- 3** is the forest the Zika virus was named after?
It is in Uganda
- 4** did the Spanish flu get its name?
People in Spain wrote about it in newspapers, so other countries believed that it had come from there.
- 5** did the Spanish call it?
They called it "French flu".
- 6** were Coronaviruses first discovered by June Almeida?
In the 1960s.

...../6

20 Complete the sentences. Choose the correct words from the box.

outbreak epidemic quarantine pandemic battle

- 1** People arriving at the port of Dubrovnik from countries with the plague had to wait for forty days or before leaving the ship.
- 2** An of a virus can be quite small, in a hospital or a school for example.
- 3** According to the US Centers for Disease Control and Prevention, it becomes an when there are more deaths than usual in one area or amongst a group of people.
- 4** A is when a virus starts to infect people across many or all countries.
- 5** Today, people try not to talk about disease as a , because it is negative and unfair.

...../5

21 Who wrote about which virus in these works? Write the correct virus and names.

a plague	the bubonic plague	the Spanish flu
Virginia Woolf	Albert Camus	William Shakespeare

- 1 wrote about in *King Lear*.
- 2 wrote about in *Mrs Dalloway*.
- 3 wrote about in *La Peste*.

...../6

22 Complete the text. Choose the correct words (a, b, c or d).

Although the Spanish flu killed millions ¹ **a** around the world, the disease was important to very **b** down **c** of **d** up

few artists. ² **a** Although many preferred to paint pictures about the war that was going on at the **b** Despite **c** However **d** Instead

same time. Edvard Munch, a Norwegian artist ³ **a** what was famous for painting *The Scream*, **b** where **c** who **d** which

did however paint pictures about the disease. He painted *Self-portrait with the Spanish flu* in 1919.

Munch ⁴ **a** died the disease, and later painted a second work which he called *Self-portrait after* **b** killed **c** survived **d** treated

the Spanish flu.

Another artist to tell the story of the Spanish flu through art was the Austrian artist, Egon Schiele.

In March 1918, Schiele ⁵ _____ his first successful art show and was becoming famous as

- a** had just had
- b** just had
- c** has just had
- d** have just had

an artist. Schiele painted the face of his friend, the artist Gustav Klimt, as he lay dying, some say

from Spanish flu. He ⁶ _____ painted the face of his pregnant wife, Edith, who sadly died

- a** too
- b** as well
- c** always
- d** also

the very next day.

...../6

23 Complete the text with the missing words.

The March of Dimes

US President Franklin Roosevelt survived polio after catching it, not ¹ a child, but at the age of thirty-nine. In 1938 he started the National Foundation for Infantile Paralysis to fight ² polio.

The money collected ³ the Foundation during the Birthday Balls – special parties to celebrate the President’s birthday – was ⁴ to researchers

to help find a vaccine for the disease.

In 1938 the famous radio actor Eddie Cantor started working with big film companies, ⁵ Warner Brothers and Metro-Goldwyn-Mayer, to produce a special radio show called “The March of Dimes”. The show encouraged the US public to give a dime – a small coin ⁶ one tenth of a US dollar, or ten cents – to the Foundation.

...../6

24 Complete the information about Paul Alexander in Chapter Ten.

Called: The man with the ¹

Disease caught: ²

When and where caught: from ³

What he couldn't do: ⁴

He believed: ⁵

He became: ⁶

...../6

25 Complete the sentences. Use the words in the box.

noises clothes a statue changes a success

- 1 The plague arrived in Eyam in a box from London containing material to make
- 2 Public health organizations have used the power of language to help make to the economy and social life to stop outbreaks becoming epidemics.
- 3 Some survivors continue to make of their lives and some have even lived through more than one pandemic.
- 4 An artist from the Congo made of a young boy with smallpox to remember the last known case of the disease in Somalia in 1977.
- 5 The little boy was finally taken to hospital where he woke up one morning to find himself inside a machine that made

...../5

26 Complete the sentences. Use nouns formed from the words in brackets.

- 1 (**Research**) believe the bacteria entered Europe on ships carrying goods for trade.
- 2 Usually you don't need to visit the doctor when you have a cold and you can buy the medication you need at the (**pharmaceutical**)
- 3 In most cases people who catch polio won't experience any symptoms and their body will be able to fight the (**infect**)
- 4 As we get older, we catch fewer colds because we have developed (**immune**) to more cold viruses.

- 5 Anwar’s doctor asked him to do a blood test so that he could make the right (**diagnose**)

- 6 Doctors will advise patients to drink lots of water to avoid (**dehydrated**)

...../6

27 Write the passive form of the sentences.

- 1 By 1800, doctors vaccinated 100,000 people against smallpox in Europe.

- 2 Doctors in poorer countries are only treating 40% of patients for HIV/AIDS.

- 3 We could have avoided these false ideas with the right public health information.

- 4 Serious viruses have attacked some of the most famous leaders in history.

...../4

28 Complete the sentences. Write the correct words formed with the prefix *dis-*.

- 1 Diseases and illnesses are often named after the doctor or scientist who first
 them.
- 2 In the future it will be interesting to see if companies workers from
 working from home.
- 3 Polio is another disease that today we can say has almost thanks to
 vaccination.
- 4 Some people with the use of vaccinations, while others refuse them
 because of their religion.
- 5 Sadly, some of these children have caught measles and now suffer very serious

...../5

29 Complete these lists. Put the words from the box into the correct categories.

tetanus brain gut lump rabies cough rash tonsillitis kidney

- Body parts:**
Symptoms:
Diseases:

...../9

30 Match the words in the box with the definitions. There are three extra words.

fever	allergy	laboratory	antibody	symptom
contagious	vaccine	cure	side effect	spread

- 1 When a virus moves through and gradually affects more parts of your body.
- 2 Something that is put into your body to protect you from catching a particular disease.
.....
- 3 A medicine that stops a disease and makes you healthy again.
- 4 You feel ill and your body becomes very hot or very cold.
- 5 A sign that someone has a disease, like a pain or a cough.
- 6 When you get red marks on your skin or you have breathing problems caused by something that you have touched or eaten.
- 7 Your body makes this when the white blood cells notice that a virus has entered it to help fight a virus.

...../7

Total...../180