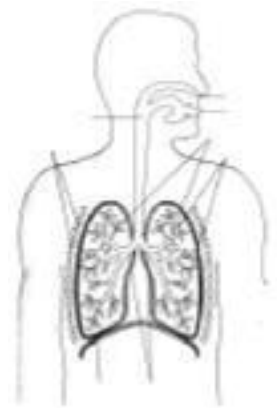
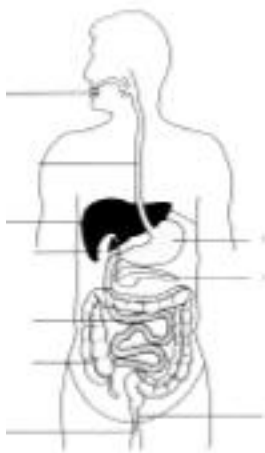


# Task Booklet

## Year 8 Science

# Cells and Health



Student Name:  
Science Teacher:

Task 1 - Food

Core

1. Name three types of food that contain high levels of sugar.  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_
2. Name three types of food that contain high levels of fat.  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_
3. Name three types of food that provide the body with protein  
(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_

Standard

4. Which foods are best at giving you energy quickly?  
\_\_\_\_\_
5. Athlete's try to limit certain types of food in their diet.  
Which **types** of food would they try to limit and *why*?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Extension

6. Supermarket dough-nuts are often sold in a paper bag that has a wax coating. Why should they be placed in a bag like this rather than a normal paper bag?

**Task 2- Food and Food Groups**

**Core**

1. Look at the pictures of different food items.



(a) Which one of the foods is the best source of vitamin C?

\_\_\_\_\_

(b) Which one of the foods is the best source of protein?

\_\_\_\_\_

(c) Which one of the foods is the best source of calcium?

**Standard**

2. Look at the information in the table and then answer the questions on the next page.

<b><i>Food</i></b>	<b><i>Carbohydrate (%)</i></b>	<b><i>Protein (%)</i></b>	<b><i>Fat (%)</i></b>
Parsnip	5.8	1.0	0.0
Steak	0.0	16.1	29.3
Kippers	0.0	18.2	15.9
Orange	9.3	0.7	0.0
Naan Bread	56.5	6.5	2.6
Pasta	83.2	1.1	5.9

(a) Which food would be most useful to our bodies for growth and repair?

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(b) Which food provides the least energy?

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(c) Which two foods provide the most energy?

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(d) The figures for each food do not add up to 100%.

Which other substances would the foods contain that make up the difference?

**Extension**

3. Carbohydrates, proteins and fats are the three main food groups our body needs. Name three other things that we must have in our diet to remain healthy.



Task 4 - Micro-organisms

Core

1. Complete the sentence by picking the correct words from the box.

microscope large smell small telescope see

*Micro-organisms are so \_\_\_\_\_ that we can only  
\_\_\_\_\_ them when we use a \_\_\_\_\_*

Standard

2. Tick the sentences below that are CORRECT.

Micro-organisms are all the same

All micro-organisms cause disease

Viruses, bacteria and fungi are all types of micro-organism

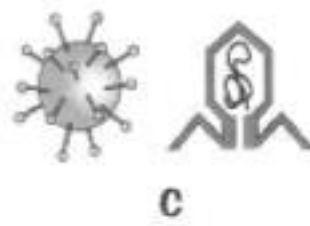
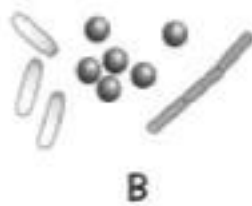
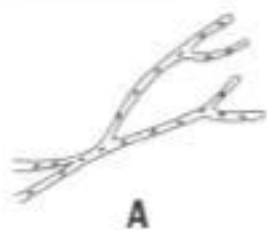
Viruses are much smaller than bacteria

Viruses produce antibiotics

Mushrooms, toadstools and yeast are all fungi

Many micro-organisms are useful

3. Diagrams A, B and C below show different types of micro-organism. Under each diagram write what type of micro-organism it is showing.



Standard

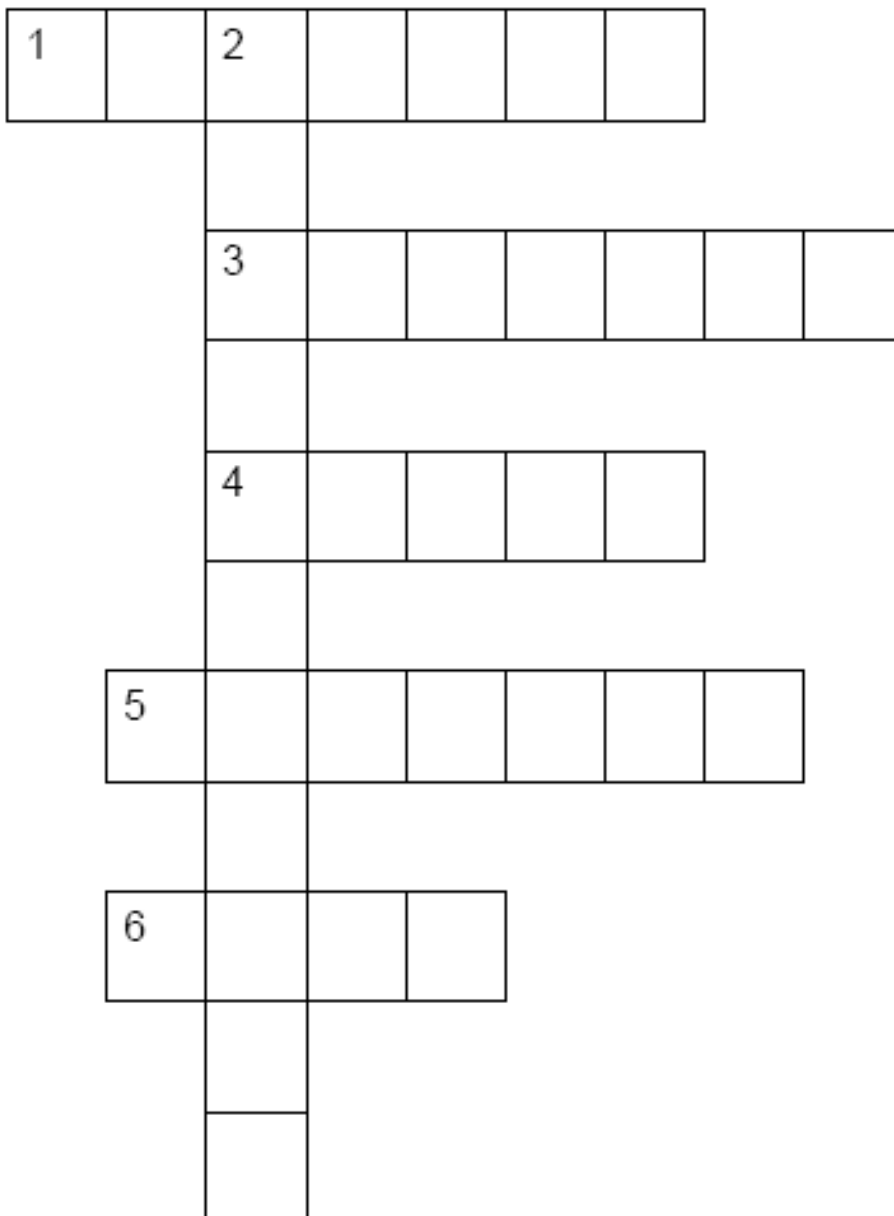
4. Solve the clues to complete the crossword below.

**Across**

- 1. The size of a fungus when compared to a bacterium.
- 3. Many fungi consist of long, fine, tangled \_\_\_\_\_
- 4. Yeast make this food rise.
- 5. Tangy food made from milk using bacteria.
- 6. Yeast and grape juice will make this.

**Down**

- 2. Fungi produce them and doctors prescribe them.



**Task 5 - Micro-organisms and Disease**

**Core**

1. A disease is a condition that prevents your body from working properly. Draw lines to match the words on the left with the definitions on the right.

<i>Infectious diseases</i>	<i>are organisms that cause disease</i>
<i>Non-infectious diseases</i>	<i>are caused by micro-organisms that can be passed on</i>
<i>Pathogens</i>	<i>cannot be caught because are not caused by micro-organisms</i>

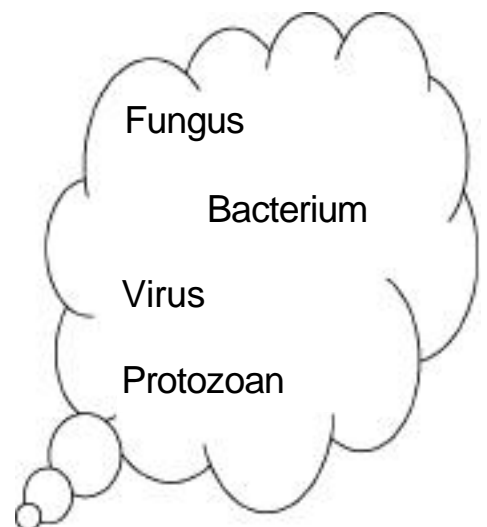
2. Which of these diseases are infectious? Circle the correct answers.

*arthritis    influenza    tuberculosis    scurvy    polio    cancer*

**Standard**

3. Complete the table using the words in the cloud.

<b><i>Disease</i></b>	<b><i>Caused by</i></b>
Rabies	
Common cold	
Tuberculosis	
Tetanus	
Food poisoning	
Whooping cough	
Athlete's foot	
Malaria	



**Extension**

4. Sort the diseases below into the five lists in the table. They may go in more than one list.

Spread by airborne droplets	Spread by contact with others	Spread in food or water	Spread by insects or animals	Passed across the placenta

Sleeping sickness

Food poisoning

Cholera

Dysentery

Whooping cough

Common cold

Malaria

Athlete's foot

Chicken pox

Tuberculosis

Rubella (German Measles)

Typhoid

Core

Task 6 - Preventing the Spread of Disease

1. Use the words in the box to complete the passage below.

---

**antiseptics   strong   disinfectants   cells   antibiotics**

---

*Drugs that kill bacteria are called.*

\_\_\_\_\_ are used to kill micro-organisms on kitchen surfaces and in bathrooms. \_\_\_\_\_ are chemicals which kill micro-organisms on living tissue. They are not as \_\_\_\_\_ as disinfectants so they don't damage your

Standard

2. Cholera is a serious bacterial infection. It comes from drinking water or eating food that is contaminated with human sewage. Cholera was common in the nineteenth century before the introduction of safe drinking water. In 1849 Dr John Snow observed that the cholera epidemic in London occurred mainly in regions that got their water from the same pump in Broad Street. When the pump was shut down, the epidemic subsided.



(a) What kind of micro-organism causes the disease cholera?

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(b) How can a person become infected with cholera?

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(c) Why did shutting down the pump in Broad Street stop the cholera from spreading?

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(d) What kind of places might you expect cholera to occur in now, in the twenty first century?

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3. List four ways that you can help prevent the spread of disease and explain how each one works.

(i)

(ii)

(iii)

(iv)

