

## Biotechnology

### Homework 2

#### Task 1

We know that in the right conditions, bacteria reproduce very rapidly. Below is a table with the number of bacterial cells over a period of time. Draw a line graph of the results.

Time (hours)	Number of bacterial cells
0	1
1	2
2	4
3	8
4	16
5	32
6	64

You will get 1 mark for labelling your axes properly, 1 mark for using an appropriate scale and 1 mark for plotting each of your points correctly.

#### Task 2

The table below shows the imagined number of people infected with a water-borne disease (such as cholera) in one of the world's developing countries.

Period	Annual number of cases
1931-1935	2440
1936-1940	2390
1941-1945	2410
1946-1950	2412
1951-1955	2413
1956-1960	1270

Use the information in the table to answer the following questions.

- 1) How many cases were reported in 1941-1945?
- 2) During which period were 2440 cases reported?
- 3) The first major change in the number of cases of the disease resulted because of a vaccination programme by the World Health Organisation. During which period did this occur?
- 4) Give a reason for your answer to the question above.
- 5) How many less cases were reported in the period 1956-1960 compared with 1951-1955?
- 6) Name two diseases that you can receive a vaccination for (1 mark for each).