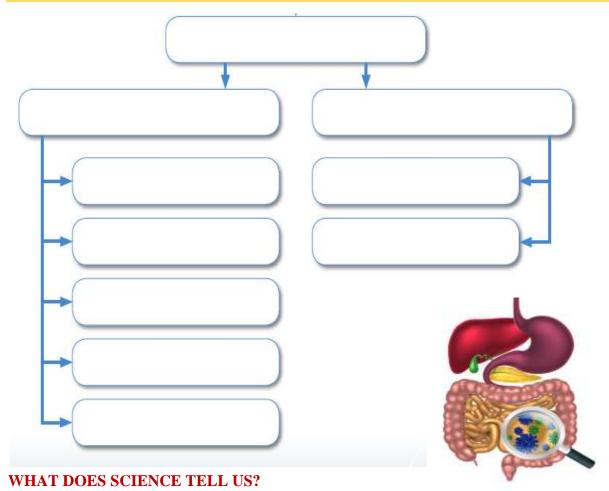
The concept map below relates to useful and harmful microbes.

1.1.Complete the map, using the following keywords (given in alphabetical order).

Decomposition of dead organisms, Digestion, Diseases, Food products, Harmful microbes, Medicines, Microbes, Pesticides, Spoilage and decomposition of our foods and textiles and houses, Useful microbes.



Microbes (also known as microorganisms) are everywhere: on surfaces we touch, in the air we breathe, and even inside us. They are too small to be seen without a microscope. Microbes include bacteria, viruses, fungi, and protozoa. They can be both, useful and harmful to humans.

One of the main ways in which bacteria are beneficial is in the food industry. The natural by-products created during normal microbial growth can be used to make many of the food products we eat. Yet, they contribute to digestion, produce vitamin K, promote development of the immune system, and detoxify harmful chemicals. Microbes are also used in pharmaceutical industries for synthesis of chemical drugs, chemical compounds and other compounds. It also leads to discovery of cell mechanisms allows pharmacists to discover antimicrobial drugs that would prevent an escalating number of communicable diseases.

On the other hand, some microbes can be harmful to humans and can cause diseases. However, it is important to know that some microbes are only harmful when taken out of their normal environment.

Share your research with your Share your research with your classmates by preparing a short presentation, preparing a short presentation.
1.3. Watch the video entitled <i>Spread of pathogens</i> at https://youtu.be/vO51sFre6fg , and then discuss with your group modes of transmission of harmful microbes (pathogenic) and suggest as many methods as you can to prevent the spread of infectious disease.

1.2.Conduct research on a Gut microbiome and explain how it influences many human health.