



## Cancer

1 What is a tumour and how do they form?

- A tumour is a mass of cells that has formed by uncontrolled growth and division of cells (mitosis).
- They often form as a result of a mutation in the genes

[ 2 marks ]

2 What are the two types of tumours and the differences between them?

- Benign tumours stay in one place - often within a membrane and are not cancerous
- Malignant tumours can spread around the body as cells break off. Is cancerous.

[ 3 marks ]

3 Smoking is a risk factor for a range of disease. Name three of them.

Lung disease, lung cancer, mouth cancer, stomach cancer, cervical cancer etc

[ 3 marks ]

4 A patient with a tumour on the skin of his neck attended a hospital clinic and was told that it was probably due to ultraviolet light exposure. The doctors removed the tumour, but 4 months later, they found similar it had developed in his lungs and liver.

a) Was his tumour benign or malignant, and how can you tell?

- Malignant because it was able to spread around his body

[ 2 marks ]

b) What do we call the tumours that developed in his lungs and liver? How do they form?

- Secondary tumours
- They form when cells break off from the main tumour and spread around the body e.g. in the blood stream

[ 2 mark ]

c) How could he have reduced the risk of developing this cancer?

- Spent less time in the sun or sun beds
- Covered himself in more sun lotion or clothes

[ 2 marks ]

5 Some genes are linked to cancers. Give an example of such as gene and the cancer/s it is linked to.

- The BRCA gene is linked ovarian and breast cancers

[ 2 marks ]

[ Total 15 marks ]