

NAME \_\_\_\_\_

## DIABETES

Energy our body needs comes from \_\_\_\_\_.

Glucose is delivered to the cells by \_\_\_\_\_.

What does glucose need to enter a cell? \_\_\_\_\_.

In order for glucose to enter the cell, insulin must bind to insulin \_\_\_\_\_. Then glucose can be taken up by the cell.

Insulin is produced in the \_\_\_\_\_.

If a person does not produce insulin, he/she has \_\_\_\_\_.

If a person *does* produce insulin, but the receptors do not work (desensitized receptors), this is \_\_\_\_\_.

Type I diabetes can be treated by \_\_\_\_\_ insulin.

Type II diabetes can be treated by (1) \_\_\_\_\_ to \_\_\_\_\_ receptors, (2) \_\_\_\_\_ changes, or (3) \_\_\_\_\_ more \_\_\_\_\_.

Problems if nothing is done:

1) \_\_\_\_\_ cannot function.

2) too much \_\_\_\_\_ can cause \_\_\_\_\_.

## CANCER

Mitosis means cells \_\_\_\_\_ themselves.

A cell that recognizes a defect can \_\_\_\_\_ (apoptosis).

How many new cells does our body produce in a day? \_\_\_\_\_

About how many cells are there in our body? \_\_\_\_\_

If there is a cell with a mutation that does not eliminate itself and grows faster, it's called a \_\_\_\_\_.

If a neoplasm, or group of abnormal cells, forms a lump, it's called a \_\_\_\_\_.

If a lump/tumor isn't doing any harm, we call it a \_\_\_\_\_; meaning it's \_\_\_\_\_.

If an abnormal cell grows like crazy and starts to infiltrate other tissue, and mutate more frequently, this group of cells are \_\_\_\_\_.

If they break away and spread, these cells have \_\_\_\_\_.

## HEART DISEASE

With heart disease, it's not the arteries leaving the heart that cause the problem. It's the \_\_\_\_\_ that provide blood to the \_\_\_\_\_.

The 'tubes' that provide the heart muscle with blood are called \_\_\_\_\_.

Plaques forming on the walls of the arteries are called \_\_\_\_\_.

This can \_\_\_\_\_ the flow of blood to the \_\_\_\_\_. This causes \_\_\_\_\_.

This causes a lack of \_\_\_\_\_ to the muscle and leads to \_\_\_\_\_. This does NOT mean the heart is \_\_\_\_\_. It means the heart is \_\_\_\_\_ to do what it should.

A strangling pain in the chest is called \_\_\_\_\_ (chest pains).

If plaque ruptures, it can lead to \_\_\_\_\_. This can \_\_\_\_\_ blood flow, and cells downstream will \_\_\_\_\_.

When heart tissue begins to die due to obstruction, this is a \_\_\_\_\_.

\_\_\_\_\_ is when the heart actually stops beating.

<http://www.khanacademy.org/science/healthcare-and-medicine/endocrinology-and-diabetes/v/glucose-insulin-and-diabetes>

<http://www.khanacademy.org/science/biology/cell-division/v/cancer>

<http://www.khanacademy.org/science/healthcare-and-medicine/heart-disease-and-stroke/v/heart-disease-and-heart-attacks>