The Causes and Nature of Cancer

Across

4. the process in which cells from a malignant tumor break away from the original tumor and travel to other parts of the body through the blood or lymph system

Down

1. thin outer cover of a cell, allows nutrients to be absorbed and waste products eliminated
2. reach a specific size and are no longer capable of growing and dividing ex: muscle or nerve cells
5. don't stop dividing, similar to renewing cells
7. stop growing when an organ reaches adult size, these cells can grow to make up for the loss ex: kidney cells
8. a group of diseases in which there is irregular growth of abnormal cells that have the ability to metasize
10. determined by genetic factors and therefore able to be passed on from parents to their offspring
12. related to two-thirds of all cancers ex: what we eat, smoking, drinking, lack of physical activity, etc.
16. substances that have been proven to initiate or promote cancer in humans
17. groups of cells that divide too much and form masses within organs (neoplasms)
18. center of a cell, directs what the cell does, including growth and reproduction
19. basic structural unit of the body

3. do not form solid tumors ex: Leukemia and Lymphoma
5. include complex hydrocarbons, certain nitrosamines, and certain metals, drugs, and hormones
6. the control mechanism of cells may also hold clue to the causes of cancer ex: smoking is an initiator and drinking is a promoter, two step process
9. include viruses that have been shown to attack the DNA of normal cells
11. include exposure to high levels of ionizing radiation or non-ionizing radiation or the effects of a solid plastic or crystal being absorbed by the body
12. a mass of cells that lack the ability to invade neighboring tissue or metasize, non-cancerous
13. always being worn out and replaced, even when the body has reached adult size ex: blood, hair, skin
14. invade and destroy normal tissue
15. an infective agent that typically consists of a nucleic acid molecule in a protein coat, able to multiply within the living cells host