Diseases caused by Smoking

Unless you're living in a cave under the heart of Kentucky tobacco country, you know that smoking isn't exactly the best thing for your health. Scientists have succeeded in associating the habit with everything from many cancers to bad-hair days.

Tobacco smoking has only recently been accepted as a major health hazard, despite its practice in western countries for more than 400 years, and much longer else where. Cigarettes became popular at the end of World War I because they were cheap. They remain popular for the future reason that they are more addictive than other forms of tobacco. The milder smoke can be more readily inhaled, allowing nicotine (a powerful addictive poison) to be quickly absorbed into the bloodstream. Other harmful substances in cigarettes include tar, which causes DNA mutations and future cancer, and carbon monoxide which competes with oxygen to bind with the hemoglobin molecules in the blood. Many of these harmful chemicals occur in greater concentrations in passive smoking (second-hand smoke), than in mainstream smoke (inhales) due to the presence of a filter in the cigarette.

Lung cancer is the most widely known and most harmful effect of smoking; 98% of cases are associated with cigarettes smoking. Symptoms include chest pain, breathlessness, and coughing up blood. The risk of developing lung cancer is about 23 times higher in male smokers compared to non-smokers; smoking is associated with increased risk of at least 15 types of cancer; or that smoking causes millions of deaths worldwide.
Tobacco smoking is also directly associated with **coronary heart disease**. **Toxins** in the tobacco smoke, cause **inflammation** and hardening in the arteries. Smoking is also linked to **emphysema, chronic bronchitis, peripheral vascular disease, and stroke**. Emphysema causes hardening the **alveoli**, the little sacks in the lungs where oxygen meets blood. **Chronic bronchitis** causes inflammation of the bronchi in the lungs. Symptoms include cough, accumulation of **phlegm** (mucus and bacteria).

**Emphysema**

**Chronic bronchitis**

Rarely are simple messages heard, such as the fact that about half of all smokers will die from smoking, and of these, about half will die before or around age 50. These numbers come from a landmark 50-year study of physicians in England, initiated in 1951.

Yet the core argument of ardent smokers remains firm: Smoking doesn't kill everyone. About 50 percent of smokers do reach old age, though with diminished eyesight, yellow teeth and bad breath. Quitting isn't easy. But the first steps are believing the risks are real and deciding whether they are worth avoiding.
A. The following diagram represents the anatomy of the human respiratory system. Show the location for emphysema by using the letter (E), and chronic bronchitis by using the letters (CB).
B. Write one or more sentences to answer the following questions

1. Discuss what harmful effects smoking have on the lungs.
   _______________________________________________________________
   _______________________________________________________________

2. Determine the physiological effect of each of the following constituents of tobacco smoke when inhaled:
   a- Nicotine: ________________________________________________
   b- Carbon monoxide: ________________________________________
   c- Tar: ____________________________________________________

3. Describe the symptoms of lung cancer.
   _______________________________________________________________
   _______________________________________________________________

4. Evaluate the evidence linking cigarette smoking to increased incidence of respiratory and cardiovascular diseases.
   _______________________________________________________________
   _______________________________________________________________

5. Why is it harmful for parents to smoke around their children (passive smoking)?
   _______________________________________________________________
   _______________________________________________________________

6. What is the main idea discussed in last paragraph?
   _______________________________________________________________
C. What effect do the following diseases have on a smokers body?

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emphysema</td>
<td></td>
</tr>
<tr>
<td>Chronic bronchitis</td>
<td></td>
</tr>
</tbody>
</table>

D. You are a doctor and you have a patient who is a new smoker. What advices would you give him?
E. Circle the letter of the word that best completes the sentence.

1. What are the major effects of smoking?
   a. increased risk in lung cancer
   b. cardiovascular disease
   c. cold
   d. fever

2. Which diseases are caused due to smoking?
   a. peripheral vascular disease
   b. emphysema
   c. lung cancer
   d. all the above

3. A respiratory disease in which airways in the lungs become narrow because of sensitivity to certain stimuli is called ...
   a. asthma.
   b. bronchitis.
   c. emphysema.
   d. alveolar reduction
F. Spider map:

Write main ideas on the slanted lines that connect to the circle. Write details on the branching lines.

Effect of Smoking