Immunology Worksheet

A Read and fill the gaps.

The principal role of the immune system is to _____ (1) the body against possible infections. The immune system has evolved over millions of years to respond and destroy any organisms _____ (2) have entered the body.

The complexity of immune systems generally mirrors evolutionary history: more 'primitive' organisms have immune systems composed ____ (3) discrete, general purpose, effector cells and molecules; more 'advanced' organisms have developed organs and tissues ____ (4) a specific immune purpose. A key part of Immunology involves studying ____ (5) the many different organs, cells and molecules of the immune system work and interact ____ (6) each other.

The earlier form of the immune system is known ____ (7) the 'innate' immune system, and is found in a wide range of organisms (including invertebrates and primitive vertebrates); the ____ (8) form is known as the 'adaptive' immune system and is common to higher vertebrates (including humans).

Specifically:

- The innate immune system includes natural barriers to infection, _____ (9) as skin and cells lining the mouth, as well as the effector cells and molecules
- The adaptive immune system includes specialised cells, organs and tissues _____ (10) are responsible for reacting to a specific foreign substance

B Answer these questions:

1 What is the major role of the immune system?
2 Describe the difference between the ‘primitive’ and ‘advanced’ immune systems.

C Read the text again and find synonyms for the following terms:

1 distinguish, tell apart
2 develop
3 particular
4 have an effect on one another
5 an obstacle

Allergy

A Lead-in

1 Are you allergic to anything?

2 What kinds of allergy do you know?

3 What do you know about allergies?

B Affinity diagram. Put these terms into appropriate categories.

C Listen and fill the missing words.

1 An allergy is an _____ to a normally harmless substance called an allergen

2 On first _____, the inhaled allergen enters the mucous membrane lining the nasal _____, where it is taken up by the antigen-presenting cell which presents it to the T-cells. These T-cells activate the B-cells to release _____ called IgE antibodies against the allergen.

3 These IgE antibodies sit on the _____ of the mast cells. The mast cells have granules _____ chemical mediators like histamine and prostaglandins etc.

4 On exposure, the allergen _____ to the IgE antibodies present on the mast cells, cross-linking them. This results in the _____ of histamine, prostaglandins and other mediators into the surrounding tissue.

5 These mediators cause dilation of the surrounding _____ vessels and increase their permeability. This results in the nasal _____, sneezing and mucous discharge of allergic rhinitis.

6 Antihistamines work by _____ the action of histamine at its receptors and thus _____ the body's reaction to the allergen

Grammar point – Indirect speech

47.1 **Yesterday you met a friend of yours, Steve. You hadn't seen him for a long time. Here are some of the things Steve said to you:**

1 I'm living in London.
2 My father isn't very well.
3 Rachel and Mark are getting married next month.
4 My sister has had a baby.
5 I don't know what Joe is doing.
6 I saw Helen at a party in June and she seemed fine.

Steve

7 I haven't seen Amy recently.
8 I'm not enjoying my job very much.
9 You can come and stay at my place if you're ever in London.
10 My car was stolen a few days ago.
11 I want to go on holiday, but I can't afford it.
12 I'll tell Chris I saw you.

Later that day you tell another friend what Steve said. Use reported speech.

1 Steve said that he was living in London.
2 He said that _____
3 He _____
4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____
11 _____
12 _____