

## RS worksheet

### A RS anatomy revision

- 1 During \_\_\_\_\_, the thoracic cavity expands and the lungs fill with air. (INHALE)
- 2 Muscular \_\_\_\_\_ (CONTRACT) enlarge the volume of the thoracic cavity during \_\_\_\_\_ (INSPIRE)
- 3 The epiglottis acts as a lid over the \_\_\_\_\_ to the oesophagus. (ENTER)
- 4 Lungs are spongy saclike \_\_\_\_\_ organs within the thorax. (RESPIRATION)
- 5 The \_\_\_\_\_ tubes lead directly to the lungs. (BRONCHUS)

### B RS pathologies

*Read and fill each gap with ONE word.*

Few sensations are as frightening as not \_\_\_\_\_ (1) able to get enough air. Although shortness of breath — known medically \_\_\_\_ (2) dyspnoea — is likely to be experienced differently \_\_\_\_\_ (3) different people, it's often \_\_\_\_\_ (4) as an intense tightening in the chest or feeling of suffocation. Depending on the cause, you may experience shortness of breath just once or have recurring episodes \_\_\_\_\_ (5) could become constant.

Very strenuous exercise, extreme temperatures, massive obesity and high altitude all \_\_\_\_ (6) cause shortness of breath \_\_\_\_\_ (7) a healthy person. Outside of these examples, shortness of breath is likely a \_\_\_\_\_ (8) of a medical problem. \_\_\_\_ (9) you have unexplained shortness of breath, especially \_\_\_\_\_ (10) it comes on suddenly and is severe, see your doctor as soon as possible.

### C At the doctor's

*Fill in the text on COUGH with these words: haemoptysis – loose – sputum – dry*

Cough is a common symptom of upper respiratory tract infection (URTI) and lung disease. A cough may be productive, where the patient coughs up \_\_\_\_\_, or non-productive, where there is none. A productive cough is often described as \_\_\_\_\_ and a non-productive cough as \_\_\_\_\_. Sputum (or phlegm) may be clear or white (*mucoïd*), yellow due to the presence of pus (*purulent*), or blood-stained (as in \_\_\_\_\_).

*Reconstruct the dialogue in an order you find suitable.*

- \_\_\_ - How long have you had the cough?
- \_\_\_ - What colour is it?
- \_\_\_ - Any problems with your breathing?
- \_\_\_ - Do you smoke?
- \_\_\_ - Do you cough up any phlegm?
- \_\_\_ - Have you noticed any blood in it?
- \_\_\_ - Oh, for years
- \_\_\_ - Usually yellow.
- \_\_\_ - No.
- \_\_\_ - Yes, I get very short of breath. I have to stop halfway up the stairs to get my breath back.
- \_\_\_ - I used to smoke heavily, but I gave up a year ago
- \_\_\_ - Yes.

### D Tuberculosis

- 1 The droplets with TB bacteria can stay active in the air for two hours.
- 2 The TB bacteria accumulate in the bronchioles.
- 3 Macrophages become active immediately when TB bacteria enter the lungs.
- 4 The immune system forms granulomata to stop the bacteria from moving around.
- 5 People with granuloma suffer from latent TB infection.
- 6 Latent TB infection becomes active when bacteria in the granuloma grow in numbers.
- 7 Latent TB infection may never develop into its active form.

## E Tuberculosis: tests and diagnosis

Read the text and find synonyms for the following terms:

- |                |            |
|----------------|------------|
| 1 normal       | 5 modern   |
| 2 inflammation | 6 reaction |
| 3 important    | 7 isolate  |
| 4 exclude      | 8 show     |

During the physical exam, your doctor will check your lymph nodes for swelling and use a stethoscope to listen carefully to the sounds your lungs make while you breathe.

The most commonly used diagnostic tool for tuberculosis is a simple skin test, though blood tests are becoming more commonplace. A small amount of a substance called PPD tuberculin is injected just below the skin of your inside forearm. You should feel only a slight needle prick. Within 48 to 72 hours, a health care professional will check your arm for swelling at the injection site. A hard, raised red bump means you're likely to have TB infection. The size of the bump determines whether the test results are significant.

### Blood tests

Blood tests may be used to confirm or rule out latent or active tuberculosis. These tests use sophisticated technology to measure your immune system's reaction to TB bacteria. QuantiFERON-TB Gold in-Tube test and T-Spot.TB test are two examples of TB blood tests.

Read and answer these questions:

- 1 What happens during the physical examination?
- 2 Does the skin test provide immediate results?
- 3 Are blood tests used in every patient?
- 4 When are imaging tests done?
- 5 What is the purpose of the sputum tests?

## F Diagnosis

Match these sentences with the stages of a consultation.

- a I'm going to have you admitted to the coronary care unit.
- b I expect the treatment will improve your pain at least and may get rid of it completely.
- c Having examined you, I'm confident that you're suffering from angina.
- d You should try to give up smoking.
- e We can never be absolutely certain about the future but you should remain optimistic.
- f You'll be given drugs to ease the pain and I expect you'll have an angiogram.

Now prepare a short dialogue explaining the TB diagnosis to a patient. Follow the stages of a consultation.

These tests require only one office visit. A blood test may be useful if you're at high risk of TB infection, but have a negative response to the skin test, or if you've recently received the BCG vaccine.

### Imaging tests

If you've had a positive skin test, your doctor is likely to order a chest X-ray or a CT scan. This may show white spots in your lungs where your immune system has walled off TB bacteria, or it may reveal changes in your lungs caused by active tuberculosis. CT scans provide more-detailed images than do X-rays.

### Sputum tests

If your chest X-ray shows signs of tuberculosis, your doctor may take samples of your sputum — the mucus that comes up when you cough. The samples are tested for TB bacteria. Sputum samples can also be used to test for drug-resistant strains of TB. This helps your doctor choose the medications that are most likely to work. These tests can take four to eight weeks to be completed.