

# Class Starters & Enders

## Making the Most of Instructional Time Five Minute Lessons

Class Starters and Enders help utilize the last minutes of class when a lesson ends but there is not enough time to start another, or for an interest approach at the beginning of class. Mini-lessons correlate to GPS in the programs areas below.

### Walking Pneumonia

**Program Areas:** Healthcare, Animal Science

**Instructions:** Read the narrative and make notes of important points, answer questions, and be ready to discuss this topic.

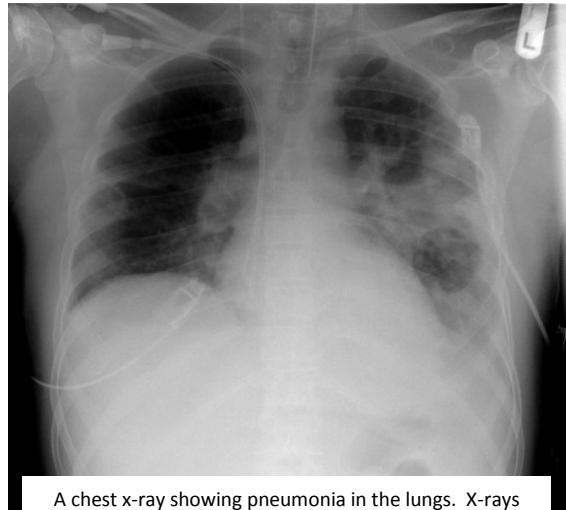
**Walking pneumonia** is the common name for **mycoplasma pneumoniae**, a relatively minor form of the much more dangerous respiratory infection, pneumonia.

It is called walking pneumonia because unlike **pneumonia**, mycoplasma pneumoniae does not usually cause symptoms severe enough to prevent a person from being active in their daily life. Its signs and symptoms mimic the flu or common cold with a few notable differences.

A person suffering from walking pneumonia will have symptoms that worsen over a period of time, up to several weeks. Patients may not know they have walking pneumonia, and may get well and never know they had the disease. Walking pneumonia has a very slow rate of onset. This is one of the defining factors between walking pneumonia, pneumonia, and the flu or common cold.

Walking pneumonia also causes the sufferer to have a dry cough that slowly worsens over time. This cough can gradually lead to bronchitis. Other symptoms include common flu symptoms such as fever, sore throat, headache, chills, congestion, and a general feeling of discomfort. In more serious cases of walking pneumonia, symptoms will mimic common pneumonia with the patient experiencing rashes, earaches, very high fevers, lumps in the neck, and a strong cough. Common pneumonia is very serious, often resulting in hospital stays and sometimes death.

The **binomial name** (genus and species) for the bacterium that causes walking pneumonia is *Mycoplasma pneumoniae*. This bacterium is not only a danger for humans but also affects animals. A mycoplasma is a **genus** of bacteria that lack a cell wall. Because of the lack of cell wall, mycoplasmas are resistant to the effects of treatments such as penicillin which attack cell walls. These bacteria can also infect cats, dogs, rats, pigs, cows, and goats. Mycoplasma causes a contagious mastitis in dairy cows and is both difficult and expensive to treat when a herd becomes infected. We often abbreviate the different species of micoplasmas by M. species, such as *M. pneumoniae* for walking pneumonia.



A chest x-ray showing pneumonia in the lungs. X-rays are often used to diagnose pneumonia which shows up as cloudlike objects in the lungs.

#### **Review Questions**

1. What is the common name for *Mycoplasma pneumoniae*?
2. What are two symptoms of *M. pneumoniae* in humans?
3. What animals can be affected by mycoplasmas?
4. Why is *M. pneumoniae* called walking pneumonia?
5. A binomial name is made up of two parts. They are:

#### **Animal Science Connection**

Pick one of the animals below and research how mycoplasma effects that animal (symptoms) and the name of the specific mycoplasma species that effects that animal.

Rats      Cows      Pigs      Dogs      Cats      Goats