



# Smallpox

**STEM Sims**

## Lesson 2: Comparing Symptoms

There are many diseases in the world, and many of them share similar symptoms. It is important to diagnose an illness correctly so that the patient can be given the correct treatment. For example, the common cold and the flu are similar illnesses with similar symptoms, but the flu is more severe and can lead to more serious health problems. Can you help diagnose an illness with similar symptoms?

### Doing the Science

1. Start the Smallpox Simulation by clicking on the “Sim” tab.
2. Click on “Symptoms” to read the symptoms of your patient. Click on “Next” in the thought bubble to read more symptoms.
3. Record the symptoms into Table 1 below.
4. Click on “Close” to close the symptoms thought bubble.
5. Take the patient’s temperature by clicking on the thermometer. Record the temperature in Table 1.
6. Take the patient’s blood pressure by clicking on the blood pressure meter cuff (called a sphygmomanometer).
7. Click on “Chart” to see the blood pressure, and record these values in Table 1.
8. Click on the arrow above “Days” to advance to the next day to see how the patient’s illness develops.
9. Repeat steps 2-8 until day 32.
10. Click on “Diagnosis” to diagnose the patient.
11. Compare the symptoms, temperature, and blood pressure to those from Lesson 1.

**Table 1.**

Day	Symptoms	Temperature	Blood Pressure
1			
4			
8			
12			
16			
20			
24			
28			
32			

### Do You Understand?

1. Did the patient have the same disease as the patient from Lesson 1?
2. Compare and contrast the symptoms from the patient in Lesson 1 and the patient in Lesson 2.
3. How do you think doctors prevent a misdiagnosis of an illness?