

MEDMYST Mission # 1

Name _____

Go to the <http://webadventures.rice.edu/> and choose MedMyst for students.

1. Click Mission 1 to begin and read the information to answer these questions.

- A. What does ORB represent? _____
- B. What term refers to pathogens or infectious agents? _____

2. Click on EACH of the doors to complete the sections below.

► **Enemy Agent**

- A. List the enemy agents (FIRST COLUMN) that cause the diseases listed in the chart below.
- B. Complete the challenge. How did you do? Circle one: 😊 😐 😞

► **Germ Blaster**

- A. Read the information provided to identify treatments for the pathogens that cause the diseases listed above. You will have to select and test each pathogen and treatment to complete this part.
- B. List the treatment(s) AND draw the symbols for each next to each enemy agent in A in the LAST COLUMN.
Note: Some may not have any treatment options. If so, write no treatments and put an X for the symbol.
- C. Complete each challenge once you are "armed". How did you do? Circle one: 😊 😐 😞

Enemy Agent (Pathogen)	Diseases Caused	Germ Blaster (Treatments)
	Anthrax, botulism, tuberculosis, & typhoid	
	Athlete's foot, histoplasmosis, ringworm, & thrush	
	Pinworm, tapeworm, roundworm, & hookworm	
	Scrapie, CJD, & mad cow disease	
	Chagas disease, amoebic dysentery, & malaria	
	Influenza, AIDS, measles, hepatitis, & Ebola	

► **Koch's Concepts**

- A. What is the problem? _____
- B. Follow the directions to test the orange. How long did the sample have to "grow"? ____ days
- C. What did the test show? _____
- D. What was the cause of the disease? _____
- F. Put these steps in the correct order using 1st, 2nd, 3rd, and 4th.
 - ____ Isolate and grow the germ
 - ____ Inoculate a health host with the newly grown germ
 - ____ Detect a germ in a sick host
 - ____ Recover the germ from the now sick host to make sure it's the same

► **Body Defender**

- A. What is the immune system? _____
- B. What is the first line of defense? _____
- C. What do we call the organs that grow, develop, and deployment of white blood cells? _____
- D. Continue the mission by correctly labeling the diagram. Check the box when done.
- E. What types of blood cells are in blood? _____
- F. White blood cells that can eliminate many pathogens are called _____
- G. White blood cells that attack certain pathogens are called _____
- H. What do we call the resistance to a specific pathogen? _____

► **Infect-O-Rama**

- A. What are the SIX ways in which infectious agents are spread? _____

- B. What THREE things could used to stop infectious diseases _____

- C. Try the game. Were you able to infect someone? _____

3. Click to activate the PDA and answer each question in the final challenge. How did you do? 😊 😐 😞