Agar Experiment Worksheet: Results

Eva is on a summer work placement at the local hospital laboratory. It is her job to read the test results and fill in the paperwork. Eva has mixed up some of the test results.

Her results sheet shows the following:

	Organism sensitivity to antibiotics					
Patient	Penicillin	Mehticillin	Erythromycin	Vancomycin	Ampicillin	Diagnosis
	×	×	×	×	×	Influenza
	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Strep throat
	×	\checkmark	\checkmark	\checkmark	×	Staphylococcus wound infection
	×	×	×	\checkmark	×	MRSA

(Vsensitive – zone of no growth visible, X not sensitive – no zone visible)

She has cultured the infectious organism isolated from each of the patients on agar plates and identified the diagnosis.

Can you repeat the antibiotic sensitivity test and match the patient to the results?



Treatment of Infection: Antibiotic Use and Antimicrobial Resistance

Agar Experiment Student Worksheet: Results

In the results section below, record the results of your sensitivity test and identify which antibiotic you would recommend the doctor to prescribe.

Patient A

Flu (Influenza virus)	Zone of Inhibition Size (mm)
Penicillin	
Meticillin	
Erythromycin	
Vancomycin	
Amoxicillin	

Patient B

Strep Throat (Streptococcus)	Zone of Inhibition Size (mm)
Penicillin	
Meticillin	
Erythromycin	
Vancomycin	
Amoxicillin	

Recommended antibiotic

Patient C

MRSA (Methicillin Resistant Staphylococcus aureus)	Zone of Inhibition Size (mm)		
Penicillin			
Meticillin			
Erythromycin			
Vancomycin			
Amoxicillin			
Recommended			

Recommended antibiotic

Patient D

Recommended

antibiotic

Staph Wound Infection (Staphylococcus aureus)	Zone of Inhibition Size (mm)		
Penicillin			
Meticillin			
Erythromycin			
Vancomycin			
Amoxicillin			
Recommended			

antibiotic



Treatment of Infection: Antibiotic Use and Antimicrobial Resistance