



Medical Math



Date	Friday, February 16, 2024	Orientation Time	8:00 AM Closed to instructors
Location	WCSCC 518 W. Prospect St. Smithville, OH 44677	Contest Time	Immediately following orientation (Contest closed to instructors)
Scope of Contest	<p>Competitors will demonstrate their ability to solve math problems that deal with the following areas:</p> <ul style="list-style-type: none">• Measurements including vital signs, temperature conversions, and height and weight• Metric and household measurements• Conversions• Ratio and Proportion• Percentage• Intake and Output• Roman numerals• Dosage calculations• The test will contain 50 problems that will evaluate competitors' problem-solving skills, as well as, their mathematical ability.• The competitors will have two hours (120 minutes) to complete the test. No bonus points are given for early completion of the test, and no competitor will be allowed to enter or leave testing site during testing.• All items listed in the appendix attached to this page are suggested references. This is just a basic reference of information that may be required for the competition. They are to be used as a reference <i>prior to competition</i>, and are NOT allowed in the competition area.• If finished before 2 hr time limit, contestant may raise hand to be excused. Test and scratch paper will be collected.		
Testing	Yes		
Eligibility	1 contestant for every 500 paid members		
Clothing	<ul style="list-style-type: none">• School Uniform: Professional attire worn in the classroom such as a criminal justice uniform, chef attire, health scrubs, or cosmetology scrubs with all identifiers covered. This includes shoes. <p>OR</p> <ul style="list-style-type: none">• Business Casual: Polo or other collared shirt and khakis or dress pants. NO JEANS.• School logos, contestant name, or other identifier on shirt must be covered.		
Provided by Contestant	<ul style="list-style-type: none">• Professional Resume – must be typed and physically produced as a hard copy• Medical Form (behind ID badge) May not compete without medical form.• Two #2 pencils (sharpened) or mechanical pencils and erasers• Basic hand-held calculator (no fraction key or graphing calculators permitted)• No smart watches, earbuds, and/or cell phones. Contestants may not use a cell phone as a calculator!		
Contest Skilled	The test questions will be taken from problems encountered in the medical field and are selected from real world applications.		

Performance Standards			
Appendix	Term millimeter centimeter meter foot/feet inch gram milligram microgram kilogram pound ounce degrees Fahrenheit degrees Celsius (Centigrade) cubic centimeter milliliter liter unit pint quart gallon tablespoon teaspoon drop or drops minim dram milliequivalent grain intravenous tablet capsule suspension intake and output	Abbreviation mm cm m ft in G mg mcg kg lb oz °F °C cc ml or mL L U pt qt gal tbsp tsp gtt or gtts minim dr mEq gr IV tab cap susp I & O	Conversion Chart Length 1 meter = 100 centimeters = 1,000 millimeters 10 millimeters = 1 centimeter Weight 1 gram = 1,000 milligrams 1 milligram = 1,000 micrograms 1 kilogram = 1,000 grams 1 grain = 60 milligrams Volume for Solids 1,000 cubic millimeters = 1 cubic centimeter 1,000 cubic centimeters = 1 cubic decimeter 1,000 cubic decimeters = 1 cubic meter Volume for Fluids 1 liter = 1,000 milliliters 1 milliliter = 1 cubic centimeter 10 centiliters = 1 deciliter 10 deciliters = 1 liter Weight Conversion 1 kilogram = 2.2 pounds 1 pound = 16 ounces 1 ounce = 0.028 kilograms Temperature Conversion °C = (°F-32) 5/9 or 0.5556 °F = (°C) 9/5 or 1.8 + 32 Metric/Household Equivalents (Note: 1 cc = 1 mL) 1 cc or 1 mL 15 gtts (drops) 5 mL or cc 1 tsp (teaspoon) 15 mL or cc 1 tbsp (tablespoon) 30 mL or cc 1 oz. (ounce) 240 mL or cc 1 cup (8 oz.) 500 mL or cc 1 pt (pint - 16 ounces) 1,000 mL or cc 1 qt (quart) (32 ounces) 1 meter 39.37 inches (3.281 feet) 0.914 meters 3 feet (1 yard) 0.3048 meters 12 inches (1 foot) 2.54 centimeters 1 inch