

Do You Have What It Takes to Be a UPMC Nurse?



Table of Contents

| | |
|--|----|
| Do I Have What it Takes? | 3 |
| Dosage Calculation | 4 |
| Dosage Calculation Worksheet | 5 |
| Comprehension Exercise | 13 |
| Medical Terminology Tips | 15 |
| Military Time | 15 |
| ESL Resources in Harrisburg Area, Pittsburgh Area, and New Castle Area | 15 |
| Temple University at Harrisburg | 17 |
| Study in our Intensive English Language Program! | 17 |
| Part-time study is right for you if | 17 |
| Full-time study is right for you if | 17 |
| New Castle | 19 |
| Erie Area | 19 |
| Dosage Calculation Answers | 20 |
| Reading Comprehension Answers | 23 |

Do I Have What it Takes?

Accelerated Diploma Nursing Program Readiness Self-Assessment

Your decision to apply for this rigorous and intensive program of study deserves careful consideration. The following information will clarify expectations and alert you to plans you will need to establish to support your success. Please use this information to assess whether this is the right program for you.

1. The program is rigorous. You must be self-directed, disciplined, focused, and accountable for your own learning.
2. The program is intensive. Your time management, organizational skills, and study skills must be consistently efficient and effective.
3. The program is highly structured. You must demonstrate initiative, reliably access information, and adhere to policies.
4. The class and clinical/simulation schedules are demanding, variable, and require a very high degree of flexibility. Schedules may vary from semester to semester and require the ability to adapt with little notice.
5. The fast-paced and demanding schedules will limit your employment ability during the program. Financial planning, including addressing financial aid or personal loan needs prior to beginning the program, is necessary. An appointment with the Financial Aid Representative is highly encouraged. Representatives are prepared to answer your questions during the program.
6. Clinical experiences will be scheduled throughout the UPMC health system and surrounding health care facilities. You will need to plan for reliable transportation and commuting time.
7. The ability to use computers for online learning, documentation, accessing information, and communicating is imperative. You must demonstrate basic computer skills and willingness to use information systems including the CANVAS learning management system. You must own or rent an electronic device.
8. The course work is interactive. UPMC Schools of Nursing use low- and high-fidelity simulation as an integral part of clinical education. Preparation for class and clinical settings is necessary for applying the course work and demonstrating competencies.
9. You will engage in individual and collaborative group work in which you will demonstrate your knowledge, skills, and professional attitude.
10. The ability to quickly synthesize readings, class, and clinical/simulation is necessary. You must also demonstrate clinical reasoning. This program has opportunity for review and remediation. You are encouraged to use this resource.
11. You are expected to have strong writing and math skills. These skills are necessary for accurate communication, collaboration, and safe care. A solid science foundation is highly recommended.
12. You must meet standards for Admission, Progression, and Graduation as outlined in the UPMC Schools of Nursing Student Handbook.
13. You will be held to a the highest standard of professional behaviors, including dignity and respect for all persons as well as integrity and honesty as representatives of the UPMC Schools of Nursing and the nursing profession.

Source: Higher Learning Commission (hlcommission.org)

Nurses and Math

Nurses must be able to do mathematics to ensure that they medicate the patients correctly.

The dosage calculation worksheet is only for practice. You are not expected to be able to solve all of these problems. This is just to prepare you for what you will be expected to master.

Dosage Calculation

Basic medication dose conversion and calculation skills are essential for providing good nursing care. Nurses are responsible for administering the correct amount of medication by calculating the precise amount of medication to give. Nurses can use three different methods for dosage calculation: ratio and proportion, formula (desired over have), and dimensional analysis.

Types of calculations:

- Solid oral medication
- Liquid oral medication
- Injectable medication
- Correct doses by weight
- IV infusions rates

Standard conversion factors:

- 1 mg = 1,000 mcg
- 1 g = 1,000 mg
- 1 kg = 1,000 g
- 1 oz = 30 mL
- 1 L = 1,000 mL
- 1 tsp = 5 mL
- 1 tbsp = 3 tsp
- 1 kg = 2.2 lb
- 1 gr = 60 mg

Set up the equation and solve for X.

1. $X = \text{Desired} \times \text{Quantity} / \text{Have}$
2. $X \text{ capsule(s)} = 200 \text{ mg} \times 1 \text{ cap} / 1,000 \text{ mg}$
3. $X \text{ capsule(s)} = 2 \text{ capsules}$
4. Round, if necessary

Dosage Calculation Worksheet

1. Round the following values to the nearest tenth.

a. $0.37 =$ _____

c. $1.66 =$ _____

b. $0.42 =$ _____

d. $2.91 =$ _____

2. Which of the following values is incorrectly written according to the math rules learned?

a. 0.5 mg

c. 1,000 L

b. 12.0 mL

d. 0.62 mg

3. If there is 150 mg in two capsules of a medication, how many milligrams are in 10 capsules?

4. If $1 \text{ kg} = 2.2 \text{ lb}$, how many kilograms are in 61.6 lb?

5. The prescriber orders 0.25 mg of a medication. The medication is available in 0.125 mg tablets. How many tablets will you administer for the ordered dosage?

6. Perform the following conversions using the correct conversions factors.

a. $300 \text{ mg} =$ _____ g

e. $51 \text{ mL} =$ _____ L

i. $66 \text{ lb} =$ _____ kg

b. $0.7 \text{ L} =$ _____ mL

f. $42 \text{ lb} =$ _____ kg

j. $7 \text{ oz} =$ _____ mL

c. $180 \text{ mcg} =$ _____ mg

g. $3.5 \text{ oz} =$ _____ mL

k. $72 \text{ kg} =$ _____ lb

d. $1.6 \text{ mg} =$ _____ mcg

h. $60 \text{ lb} =$ _____ kg

7. A client consumed the following during your shift:

10 oz Coffee

8 oz Cranberry juice

6 oz Chicken broth

Calculate the total intake in mL _____

8. A client consumed the following during your shift:

8 oz Milk

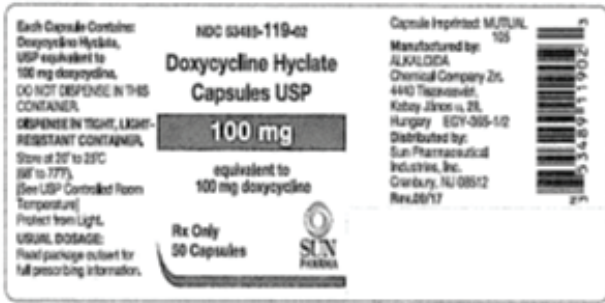
6 oz Orange juice

4 oz Water

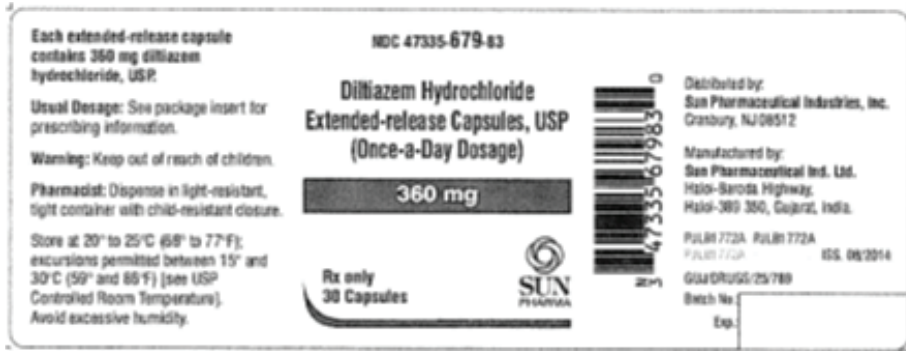
Calculate the patient's intake in mL _____

9. A client weighed 95 kg on the initial patient visit to the clinic. When the client reported for the subsequent visit the client reported losing 11 lb. What is the client's current weight in kg?

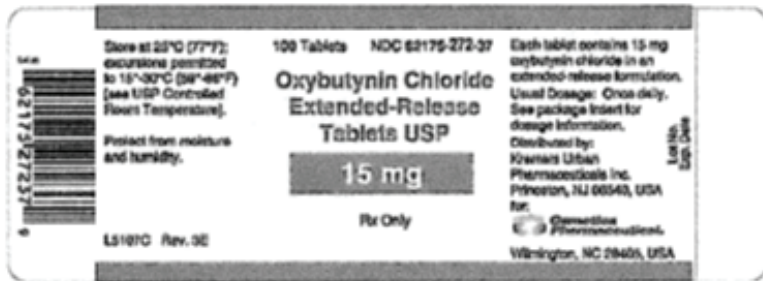
10. How many milligrams are in one capsule of Doxycycline as shown on the medications label below?



11. There is 360 mg in _____ capsule(s) of Diltiazem Hydrochloride as shown in the medication label below.



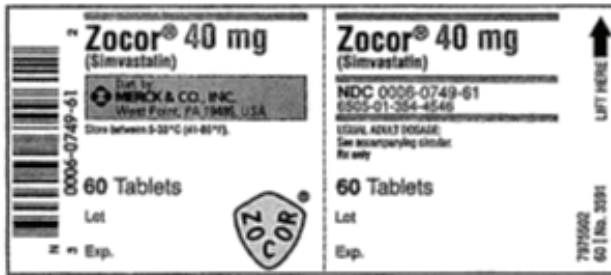
12. How many milligrams are in one tablet of the Oxybutynin Chloride extended release medication as shown in the medication label below?



13. The provider orders a patient to receive 250 mg of Amoxil. Using the medication label below, how many mL will you administer to the patient to achieve the ordered dose?



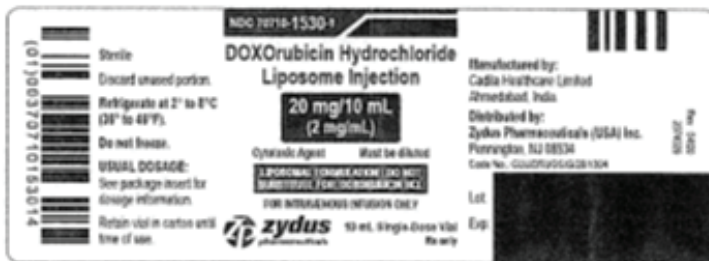
14. A physician has ordered for a patient to take 60 mg of Zocor. Using the medication label below, how many tablets of Zocor will the patient take to achieve the desired dose?



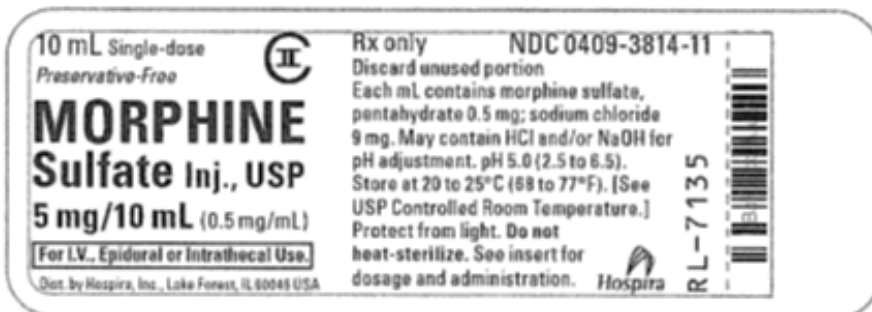
15. A physician orders a patient to receive 75 mg Metoprolol Tartrate. Using the medication label below, determine how many tablets the patient should take to receive the appropriate dosage.



16. A provider orders for a patient to receive 6 mg of the medication below. Use the medication label to determine how many milliliters should be administered to achieve the prescribed dose.



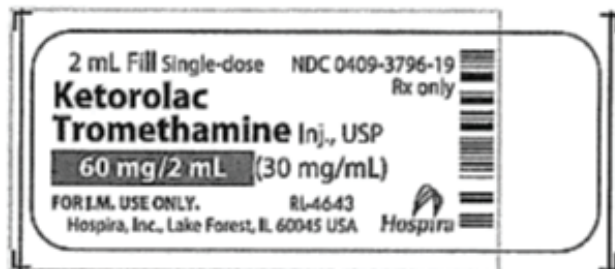
17. How many milliliters should you administer to provide the patient with 1 mg of Morphine? Use the information found on the medication label below to determine the proper dose.



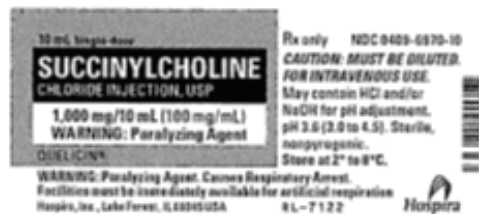
18. A patient is to take 150 mg of Lithium Carbonate daily. Use the medication label below to determine how many tablets a patient should take to achieve the correct dose.



19. A provider prescribes for a patient to receive a 90 mg dose of Ketorolac via slow IV push. How many milliliters will you administer to achieve the proper dose? Use the medication label below to determine your proper dose.



20. A patient is prescribed a 300 mg dose of Succinylcholine. How many mL should you administer to achieve the correct dosage? Use the medication label below to determine your answer.



Nursing Academic Word List

| | | | | |
|--------------|-------------|---------------|--------------|--------------|
| abdomen | anesthesia | campaign | compress | covariate |
| absorb | angina | cancer | comprise | create |
| abstract | annual | cannula | compute | criteria |
| abuse | antibiotic | capable | concentrate | cue |
| academy | anticipate | capacity | concept | culture |
| access | apparent | capture | conclude | cycle |
| accurate | appraise | caregiver | concurrent | data |
| achieve | appreciate | category | conduct | decade |
| acid | approach | catheter | confidential | decline |
| acknowledge | appropriate | caucasian | confirm | deficit |
| acquire | approximate | cell | conflict | define |
| activate | area | centimeter | confound | definite |
| acute | artery | certificate | congruence | demographic |
| adapt | ascertain | cervix | consecutive | demonstrate |
| addict | aspect | challenge | consent | dense |
| adequate | aspirate | chart | consequent | depress |
| adhere | assess | checklist | considerable | derive |
| adjust | assign | chemotherapy | consist | design |
| administer | assist | chronic | constant | designate |
| administrate | assume | circumstance | constipation | despite |
| admission | assure | cite | constitute | detect |
| adolescent | attach | clarify | construct | deteriorate |
| adult | attenuate | client | consult | development |
| adverse | attitude | clinic | consume | deviate |
| advocate | attribute | cluster | contact | diabetes |
| affect | audit | cognition | contaminate | diagnose |
| aggression | auditory | cohort | context | diary |
| aid | author | collaborate | contrast | diet |
| alcohol | autonomy | colleague | contribute | digit |
| alert | available | commence | convene | dimension |
| alleviate | aware | comment | coordinate | diminish |
| allocate | bacteria | communicate | cope | discharge |
| alter | barrier | community | core | disclose |
| alternative | baseline | compensate | coronary | discrepancy |
| ambulate | benefit | competence | correlate | discriminate |
| analgesia | bias | complex | correspond | disorder |
| analogue | breast-feed | compliance | counsel | display |
| analyze | brief | component | county | disrupt |
| anatomy | burden | comprehensive | couple | distinct |

| | | | | |
|-------------|-------------|---------------|--------------|--------------|
| distress | ethnic | globe | instance | marital |
| distribute | evaluate | glucose | institute | maximize |
| diverse | evident | goal | instruct | mechanism |
| document | evolve | grade | intake | mediate |
| domain | exceed | graduate | integrate | medical |
| donate | exclude | guideline | intense | medication |
| dose | exert | headache | interact | membrane |
| drain | exhaust | hence | intermittent | mental |
| drama | exhibit | heterogeneous | internal | metabolic |
| drug | expand | highlight | interpret | method |
| duration | expert | hip | interval | midwife |
| dynamic | explicit | hormone | intervene | milligram |
| economy | expose | hospice | interview | milliliter |
| efficacy | external | household | intravenous | millimeter |
| electron | extract | hypertension | invasive | minimal |
| element | extubate | hypothesis | inventory | minimize |
| elevate | facet | identify | investigate | minimum |
| elicit | facilitate | illustrate | irritate | minor |
| eligible | factor | image | isolate | mobile |
| eliminate | faculty | immune | issue | modify |
| emerge | fatigue | impact | item | modulate |
| emergency | feasible | impair | job | monitor |
| emotion | feature | implement | journal | mood |
| emphasis | feedback | implicate | kilogram | morbid |
| empower | figure | incidence | label | mortality |
| enable | final | income | laboratory | motive |
| encounter | finance | incorporate | lateral | muscle |
| endure | flexible | index | lesion | nausea |
| energy | fluid | indicate | lifestyle | negate |
| engage | focus | individual | linear | nerve |
| enhance | follow-up | induce | link | network |
| enroll | format | infant | literate | neurology |
| ensure | formula | inflame | locate | nevertheless |
| environment | foundation | inflect | logistic | norm |
| epidemic | fracture | infuse | longitudinal | normal |
| episode | framework | inhibit | magnitude | nutrition |
| equate | frustrate | initial | maintain | obese |
| equip | function | initiate | major | objective |
| equivalent | fund | injection | malignant | obstruct |
| error | furthermore | injure | mandate | obtain |
| establish | gender | input | manipulate | obvious |
| estimate | generate | insert | manual | occupy |
| ethic | geography | insight | margin | occur |

| | | | | |
|--------------|---------------|----------------|-------------|------------|
| odd | positive | radiate | routine | strategy |
| oncology | posture | random | rural | strengths |
| ongoing | potential | range | scan | stress |
| onset | practitioner | ratio | schedule | structure |
| optimal | precede | rationale | scope | subjective |
| option | precise | recall | score | subscale |
| oral | predict | receptor | section | subsequent |
| orient | predominant | recipient | secure | suction |
| outcome | pregnant | recover | sedation | sufficient |
| outpatient | preliminary | recruit | seek | sum |
| overall | premature | referral | select | summary |
| oxygen | prescribe | refine | self-esteem | supervise |
| panel | prevalent | regimen | senior | supplement |
| parameter | previous | region | sensation | suppress |
| participate | primary | register | sequence | surgery |
| partner | principal | regress | series | survey |
| passive | principle | regulate | serum | survive |
| pathology | prior | rehabilitation | session | sustain |
| pathways | priority | reinforce | setting | symptom |
| peak | probe | reject | sex | syndrome |
| pediatric | proceed | relax | shift | system |
| peer | process | release | significant | tape |
| perceive | professional | relevant | similar | target |
| percent | profile | rely | site | task |
| period | prognosis | remove | software | team |
| peripheral | progression | renal | somewhat | technical |
| persist | project | replicate | source | technique |
| personnel | prolong | require | specialize | technology |
| perspective | proportion | research | specific | temporal |
| pharmacology | prospect | reside | specify | tense |
| phase | prostate | resolve | spectrum | terminate |
| phenomenon | protein | resource | spinal | theme |
| philosophy | protocol | respiratory | spontaneous | theory |
| physical | province | respond | spouse | therapy |
| physician | psychology | restrict | stable | thereby |
| physiology | publication | retain | staff | thorax |
| pill | publish | retrospect | standardize | threshold |
| pilot | pulmonary | reveal | statistic | timing |
| placebo | pulse | reverse | status | tissue |
| placement | qualitative | revise | sterile | tolerate |
| plus | quantitative | rigor | stigma | topic |
| policy | questionnaire | role | stimulate | toxic |
| portion | quit | rotate | strain | tract |

tradition
transcribe
transit
transmit
transplant
transport
trauma
treat
trend

trigger
tumor
ulcer
ultimate
ultrasound
undergo
underlie
undertake
unique

urban
urgent
urine
utilize
vaccine
valid
vary
vascular
vehicle

vein
ventilate
verbal
verify
version
via
victim
visible
visual

vital
voluntary
vomit
vulnerable
ward
well-being
whereas
withdraw
workload

Comprehension Exercise

Pablo Picasso was a Spanish artist who worked in many mediums. He is the best-known artist of the 20th century. He is best known for co-founding the Cubist Movement. The Cubist Movement showed that art did not have to be an imitation of life and that beauty could be found in unfamiliar images. This opened the door for every subsequent artist to express themselves in the way that they wanted; not in a way that was prescribed.

He is also known for the distinct periods of his work. These include the Blue Period, the Cubist Period, and the African-Influenced Period. In the Blue Period, Picasso's paintings were predominantly blue and blue green in color with small highlights of other colors. The most famous painting of the Blue Period is called *The Old Guitarist*. These paintings have life-like figures that are easily recognizable. The figures in Cubist Period paintings are portrayed abstractly with emphasis on geometric shapes. The viewer must study the painting more to determine what is being portrayed. The most famous painting of this period is called *Guernica*. The African-Influenced Period drew inspiration from African tribal art and culture. The most famous painting of this period is called *Les Femmes d'Alger*.

Picasso continued to make art until his death in 1973. His original art work has sold for over \$100,000,000.00. Most artists who have come after him benefited from his contributions to art.

1. What is Pablo Picasso best known for?
 - a. He is best known for having several distinct styles in his work.
 - b. He is best known for making Spanish painters better known.
 - c. He is best known for co-founding the Cubist Movement.
 - d. He is best known for working in several mediums.
2. Why was the Cubist Movement important?
 - a. It contained strangely composed images
 - b. It was different than the art that was popular.
 - c. It made people want to look at art in museums.
 - d. It promoted personal expression over established ideas.
3. Picasso also had a Rose Period. What do you think those paintings looked like?
4. Why do you think Picasso's work has sold for so much money?

Comprehension Exercise

Ignaz Semmelweis was a Hungarian physician in the early to mid-1800s. Semmelweis discovered that thorough hand hygiene reduced the risk of maternal death by puerperal fever. In 1847 Dr. Semmelweis performed a study that proved that hand washing with a disinfectant solution prior to patient contact saved lives. He published his discovery and assumed that other physicians would embrace it. His findings contradicted the scientific and medical opinions of the time, however, because the existence of germs was unknown. The prevalent thought at the time was that diseases came from bad air. Dr. Semmelweis could not fully explain why hand washing was effective, but he knew it prevented mothers from dying. Dr. Semmelweis continued to insist that hand washing was important but nobody listened. Other physicians felt insulted that they were being asked to wash their hands. In 1865 Dr. Semmelweis died in a mental institution of an infected wound on his hand.

A few years after Semmelweis died, Louis Pasteur confirmed germ theory. Germ theory states that the presence of microorganisms such as bacteria and viruses cause disease states. Germ theory is now widely accepted. Hand washing with a disinfectant solution kills microorganisms that are found on the hands. Hand washing between patients also decreases the spread of germs from one patient to the next and prevents cross-contamination.

Hand washing is necessary for health care and other professions. Dr. Semmelweis insisted that his theory was correct despite opposition from the establishment. His tenacity has positively impacted subsequent generations.

1. In what year did Dr. Semmelweis perform his hand washing study?
 - a. 1874
 - b. 1902
 - c. 1847
 - d. 1865
2. What industries besides health care benefit from hand washing?
3. How would the world be different without the confirmation of germ theory?

Medical Terminology Tips

- **FREE ONLINE MEDICAL TERMINOLOGY COURSE**
- Go to: <https://www.dmu.edu>
- Type in the search box: medical terminology course
- Please register for the free course.

Military Time

To avoid confusion, we use military time when we chart.

Military time is written as four digits, with no colon.

E.g., 11:00 a.m. = 1100

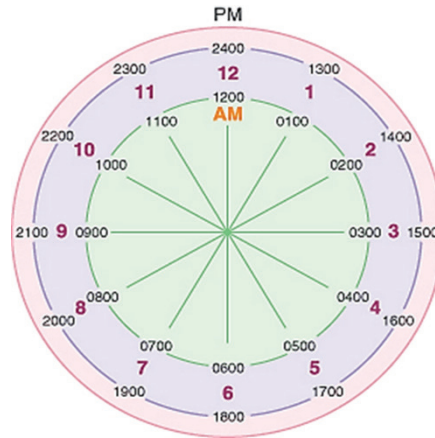
There is no need for “AM” or “PM”

For the afternoon hours, add 12 to get military time.

E.g., 2:00 p.m. = 1400

(2:00 + 12 = 1400)

This is read as “fourteen hundred hours.”



ESL Resources in Harrisburg Area, Pittsburgh Area, and New Castle Area, Erie

If English is a second language for you, there are a wide variety of resources to help improve your English language skills.

Harrisburg Area Resources:

Catholic Charities

Catholic Charities provides ESL classes to immigrants and refugees throughout the Capital Region. Their ESL program offers 15 classes per year at different sites in the community. Typical courses have 10 to 20 students and range from beginner English to advanced classes in grammar and conversation.

Courses include:

- Workplace English Skills
- ESL Language Computer Labs
- United States Civics/Citizenship
- Low Literacy Tutoring Programs

<http://www.cchbg.org/get-help/immigration-refugee-services/english-second-language/>

Trinity Presbyterian Church

Currently, they are not accepting new students to our ESL classes. In-person registration starting in the fall will take place on Wednesday, September 13, at 6:30 p.m.

If you have any questions, send an email to ESL@trinityhbg.com.

English as Second Language (ESL) classes are Wednesday nights from 6:30 to 7:45 p.m. Registration for English classes is now closed. If you have questions, please contact Holly Lankford, ESL Coordinator, at esl@trinityhbg.com.

All ESL Classes are Free!

We offer the following levels:

- Levels Pre 1 and 1: For those who speak little or no English.
- Levels 2 and 3: For those who speak some English and desire to increase their vocabulary and pronunciation.
- Advanced Conversation Class: For those who want to improve their pronunciation and accent and to feel more comfortable conversing at work, at school, and in the community.

All of our teachers are unpaid volunteers who want to help each student learn to speak better English.

For those students with children, we do offer nursery for newborns to one year old; Kids Club ministry is open for children ages 2 through 5th grade; Middle School Youth Group for those in 6th to 8th grades.

If you have questions or interest in attending the English classes, please contact the church office by calling 717-545-4271 or email ESL@trinityhbg.com.

Harrisburg Area Community College (HACC)

HACC's English as a Second Language (ESL) programs provide comprehensive training for students to improve their English skills, regardless of their end goal. Students will benefit from their programs by developing their reading, writing, speaking, and listening skills and increasing their confidence. They offer two types of programs:

- ESL for Academic Purposes, which focuses on further academic study at the college level.
- ESL for Community, College, and Career, which focuses on work, community, and everyday life.

Which is the right English as a Second Language (ESL) program for me?

| | ESL for Community, College, and Career | ESL for Academic Purposes |
|-------------------------------|--|---|
| What type of program is this? | <p>A noncredit training program</p> <p>Focuses on:</p> <ul style="list-style-type: none"> • Learning English for work, community, and everyday life • Communicating better at work • Conversing more confidently in meetings and appointments • Exploring college and career options to determine future goals | <p>A credit program for academic purposes that can lead to an associate degree</p> <p>Focuses on:</p> <ul style="list-style-type: none"> • Learning English for academic study at the college level • Studying at the college level to earn a credential • Transferring to other colleges |
| How long is the program? | <p>Each level includes a 10-week class with 50 hours of instruction. Classes are offered either two mornings or two evenings per week.</p> <p>Levels:</p> <ul style="list-style-type: none"> • Beginner • Intermediate • Advanced | <p>Each level is a 14-week course with three to four hours of instruction each week. Classes are offered during the day and in the evening.</p> <p>Levels:</p> <ul style="list-style-type: none"> • Reading and Writing 1 and 2 • Speaking and Listening 1 and 2 • Grammar 1 and 2 • Academic English Bridge Course |

| | | |
|----------------------------------|---|--|
| What is the cost? | <p>The cost is \$350 plus \$40 for the textbook for each level.</p> <p>Scholarships are available to those who qualify.</p> | <p>Tuition is charged per academic credit and varies based on citizenship, as well as Pennsylvania and school district residency.</p> <p>Financial aid and scholarships are available to those who qualify.</p> |
| How do I get more help deciding? | <p>Interested students can attend a free information session on the first Friday of the month at HACC Midtown (1523 North Fourth St., Harrisburg, PA 17112) or via Zoom:</p> <p>https://hacc.zoom.us/j/7842282235.</p> <p>For additional information, please email eslinfo@hacc.edu or call 717-780-2449.</p> | Please email start@hacc.edu . |

English as a Second Language (ESL)

<https://www.hacc.edu/ProgramsandCourses/Programs/English-as-a-Second-Language.cfm>

Temple University at Harrisburg

Whether you are a beginning, intermediate, or advanced English speaker, the IELP has courses that fit your needs.

- Learn from experienced instructors with advanced degrees
- Improve your English skills with students from around the globe
- Learn about the U.S. and American culture
- Work though to IELP level Advanced 2 and apply for a Temple University undergraduate degree
- Join fun social events to improve your English in a relaxed environment

Part-time study is right for you if:

- You only want to take one or two classes
- You don't need an F-1 visa
- **Click the link for more information on our TCALC Online English Classes.**
<https://ielp.temple.edu/programs/tcalc-online-english-classes>

Full-time study is right for you if:

- You want to improve your English language skills quickly
- You plan to apply to Temple University
- You need an F-1 visa
- **Click the link for more information about our Enrichment and Core Classes.**
<https://ielp.temple.edu/programs/intensive-english-language-program/intensive-english-language-program-0>

IELP Eligibility Details:

- *F-1* visa students must study full-time.
- Students on a *B1/B2* visa or other visa type can only study part-time.

<https://ielp.temple.edu/programs/intensive-english-language-program>

Pittsburgh Area Resources:

CCAC offers classes: Grammar for ESL | Community College of Allegheny County

<https://www.ed2go.com/ccac/online-courses/esl-grammar/#:~:text=It%20is%20designed%20to%20prepare%20you%20for%20regular,that%20you%20may%20be%20taking%20or%20will%20take.>

Greater Pittsburgh Literacy Council: Programs | GED, Reading, ESL, Math, Work Skills | Literacy Pittsburgh

<https://www.literacypittsburgh.org/programs/>

University of Pittsburgh: English as a Second Language (ESL) Programs of Study | English Language Institute | University of Pittsburgh

<https://www.eli.pitt.edu/programs>

Duolingo: Duolingo - The world's best way to learn a language

<https://www.duolingo.com/>

Goodwill SWPA - Allegheny County Residents: Goodwill SWPA - ESL

<https://www.goodwillswpa.org/life-changing-services/education-and-training/esl-classes/>

Free Online Resource through Pitt: Clinical Terminology for International and U.S. Students | Coursera

<https://www.coursera.org/learn/clinical-terminology>

Carnegie Library of Pittsburgh: ESL Materials and Resources - Carnegie Library of Pittsburgh

<https://www.carnegielibrary.org/staff-picks/esl-materials-and-resources/>

Mount Lebanon Library: English as a Second Language | Mt. Lebanon Public Library, PA

<https://mtlebanonlibrary.org/225/English-as-a-Second-Language>

(resources outside of the Pittsburgh area)

Pennsylvania State ELL Resources: Pennsylvania: ELL Resources | Colorín Colorado

<https://www.colorincolorado.org/pennsylvania-ell-resources>

English Center in Youngstown Ohio free 1-330-743-5767

<https://www.englishcenteryoungstown.com/>

Lifelong Learning Center (Lawrence County Learning Center) free 724-654-1500

<https://www.learningchoicesinfo.org/>

New Castle

The Lawrence County Learning Center provides support and education training for residents (think GED and similar training). Their website can be found here:

<https://www.lawrencecountylearning.com/individuals/>

The Lawrence County Learning Center is one of several state-funded CEC programs — Community Education Councils. The CEC work in many communities throughout the state doing similar work:

<https://www.education.pa.gov/Postsecondary-Adult/CollegeCareer/Pages/Community-Education-Council.aspx>

Some organizations in Pittsburgh support immigrant populations.

<https://www.literacypittsburgh.org/free-english-classes/>

<https://isacpittsburgh.org/#services>

Finally, the local Intermediate Units have info about ESL:

<https://www.aiu3.net/>

Erie Area

IU5 Building

English as a Second Language | Community Services

<https://www.iu5.org/community-services/english-as-a-second-language>

Erie Neighborhood House

The workplace and in the community.

ESL/ABE - Erie Neighborhood House

<https://eriehouse.org/programs/esl-abe/>

MCRC

Multicultural Community Resource Center | Erie Community Foundation

<https://www.eriecommunityfoundation.org/donors/give-today/give-to-a-nonprofit/multicultural-community-resource-center>

Answers

Dosage Calculation Worksheet Answer Sheet

- (a) 0.4
(b) 0.4
(c) 1.7
(d) 2.9
- (c) – has a trailing zero
- 150 mg: 2 capsules = x mg: 10 capsules
 $2 X/2 = 1500/2$
 $X = 750 \text{ mg}$
- 1 kg: 2.2 lb = X kg: 61.6 lb
 $2.2 X/ 2.2 = 61.6/ 2.2$
 $X = 28 \text{ kg}$
- 0.125 mg: 1 tablet = 0.25 mg: X tablet
 $0.125 X/ 0.125 = 0.25/0.125$
 $X = 2 \text{ tablets}$
- (a) 300 mg = _____ g → conversion factor: 1000 mg = 1 g
1000 mg: 1 g = 300 mg: X g
 $300/1000 = 1000 X/1000$
 $X = 0.3 \text{ g}$

(b) 0.7 L = _____ mL → conversion factor: 1L = 1000 mL
1 L: 1000 mL = 0.7 L: X mL
 $X = 700 \text{ mL}$

(c) 180 mcg = _____ mg → conversion factor: 1000 mcg = 1 mg
1000 mcg: 1 mg = 180 mcg: X mg
 $180/1000 = 1000 X/1000$
 $X = 0.18 \text{ mg}$

(d) 1.6 mg = _____ mcg
1000 mcg: 1 mg = X mcg: 1.6 mg
 $X = 1600 \text{ mcg}$

(e) 51 mL = _____ L → conversion factor: 1L = 1000 mL
1000 mL: 1L = 51 mL: X L
 $51/1000 = 1000 X/1000$
 $X = 0.051 \text{ L}$

(f) 42 lb: _____ kg → conversion factor: 1 kg = 2.2 lb
1 kg: 2.2 lb = X kg: 42 lb
 $2.2 X / 2.2 = 42 / 2.2$
X = 19.1 kg

(g) 3.5 oz = _____ mL → conversion factor: 30 mL = 1 oz
1 oz: 30 mL = 3.5 oz: X mL
X = 105 mL

(h) 60 lb = _____ kg
1 kg: 2.2 lb = X kg: 60 lb
 $2.2 X / 2.2 = 60 / 2.2$
X = 27.3 kg

(i) 66 lb = _____ kg
2.2 lb: 1 kg = 66 lb: X kg
 $66 / 2.2 = 2.2 X / 2.2$
X = 30 kg

(j) 7 oz = _____ mL
30 mL: 1 oz = X mL: 7 oz
X = 210 mL

(k) 72 kg: _____ lb
1 kg: 2.2 lb = 72 kg: X lb
X = 158.4 lb

7. $10 + 8 + 6 = 24$ oz → 1 oz: 30 mL = 24 oz: X mL
X = 720 mL

8. $8 + 6 + 4 = 18$ oz → 1 oz: 30 mL = 18 oz: X mL
X = 540 mL

9. 1 kg: 2.2 lb = X kg: 11 lb
 $2.2 X / 2.2 = 11 / 2.2$
X = 5 kg → 95 kg - 5 kg = 90 kg = client's current weight

10. 100 mg

11. 1 capsule

12. 15 mg

13. 125 mg: 5 mL = 250 mg: X mL
 $1250 / 125 = 250 X / 125$
X = 10 mL

14. 40 mg: 1 tab = 60 mg: X tab
 $60/40 = 40 X/40$
 $X = 1.5$ tablets
15. 25 mg: 1 tablet = 75 mg: X tablet
 $75/25 = 25 X/25$
 $X = 3$ tablets
16. 20 mg: 10 mL = 6 mg: X mL
 $60/20 = 20 X/20$
 $X = 3$ mL
17. 5 mg: 10 mL = 1 mg: X mL
 $10/5 = 5 X/5$
 $X = 2$ mL
18. 300 mg: 1 tablet = 150 mg: X tablet
 $150/300 = 300 X/300$
 $X = 0.5$ tablet
19. 60 mg: 2 mL = 90 mg: X mL
 $180/60 = 60 X/60$
 $X = 3$ mL
20. 100 mg: 1 ml = 300 mg: X ml
 $100 \text{ mg } X = 300 \text{ mg}$
 $X \text{ ml} = 300 \text{ mg} / 100 \text{ mg}$
 $X = 3\text{ml}$

Reading Comprehension Answers

1. What is Pablo Picasso best known for?
 - a. He is best known for having several distinct styles in his work.
 - b. He is best known for making Spanish painters better known.
 - c. He is best known for co-founding the Cubist Movement.
 - d. He is best known for working in several mediums.
2. Why was the Cubist Movement important?
 - a. It contained strangely composed images.
 - b. It was different than the art that was popular.
 - c. It made people want to look at art in museums.
 - d. It promoted personal expression over established ideas.
3. Picasso also had a Rose Period. What do you think those paintings looked like?

The pictures in this period were in shades of red and pink.

4. Why do you think Picasso's work has sold for so much money?

Picasso changed the way the world interacted with art. The work he produced changed the way that art was made, displayed, received, and viewed by the public.

1. In what year did Dr. Semmelweis perform his hand washing study?
 - a. 1874
 - b. 1902
 - c. 1847
 - d. 1865
2. How did Louis Pasteur help prove germ theory and Dr. Semmelweis' theory?
 - a. By showing that air did not cause meat to spoil.
 - b. That covering meat causes it not to spoil.
 - c. By showing that flies grow from maggots.
 - d. By telling people about Semmelweis' work.
3. What industries besides health care benefit from hand washing?

Food service, child care, manufacturing, laboratory work.

4. How would the world be different without the confirmation of germ theory?

More people would die from infectious and contagious diseases. We would not have antibiotics. We would not have many life-saving vaccines.

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