

Things I Like

1. My hobbies are:
 2. When I have free time, I like to:
 3. The most interesting section of the newspaper is:
 4. My favorite thing to read is:
 5. My favorite movie/television show is:
 6. In conversation, I like to talk about:
 7. My favorite subjects in school were:
 8. My favorite job so far has been:
 9. I have traveled to:
 10. My favorite holiday/season/time of year is:
-

Job Values Inventory

This exercise helps you identify which job qualities you value most. Rank the items below from 1 to 12 with 1 being most important and 12 the least important. Once you begin exploring job possibilities, focus only on jobs that meet your highest ranked values.

- _____ Good salary
- _____ Good benefits (insurance, retirement, etc.)
- _____ Job security
- _____ Work hours that meet your needs
- _____ Satisfactory location
- _____ Compatible co-workers, supervisors, customers
- _____ Opportunity to learn and develop skills
- _____ Challenging and satisfying work
- _____ Good working conditions/environment
- _____ Like/believe in what the organization does
- _____ Chance for promotion/advancement
- _____ Prestige and respect

Adapted from the California Career Planning Guide 2003–2005

Things I Have Done

Working With People

- ☐ Take care of a sick relative
- ☐ Give medicine to a child
- ☐ Care for child who is disabled
- ☐ Help at a school event
- ☐ Make phone calls
- ☐ Visit friends and family in nursing homes
- ☐ Visit new places
- ☐ Take care of my children or other people's children
- ☐ Teach or coach a sport
- ☐ Organize parties for family or friends
- ☐ Teach at my place of worship
- ☐ Help children with their homework
- ☐ Participate in events in my community
- ☐ Volunteer at a library
- ☐ Work with other parents in the schools
- ☐ Go on field trips for teens and help out
- ☐ Play music or dance for others
- ☐ Other _____

Working With Data

- ☐ Write checks and balance a checkbook
- ☐ Do a budget for my family
- ☐ Record money for a club or group
- ☐ Handle the money/finances for a small business
- ☐ Read a map
- ☐ Follow directions
- ☐ Read a flyer or poster
- ☐ Apply for a loan or credit
- ☐ Fill out forms and applications
- ☐ Make airline arrangements
- ☐ File papers
- ☐ Enter data onto a computer
- ☐ Select and price items to be purchased by a group
- ☐ Maintain sales records for an organization's store or sale
- ☐ Choose colors for sewing, crafts, decorating projects
- ☐ Other types of working with data

Working With Things

- ☐ Take care of plants, garden, farm
- ☐ Cook
- ☐ Do housecleaning at home
- ☐ Arrange flowers
- ☐ Care for animals
- ☐ Type, file, perform office work for an organization
- ☐ Use a computer
- ☐ Take photographs
- ☐ Operate stereo equipment
- ☐ Build furniture
- ☐ Repair equipment, repair appliances
- ☐ Operate equipment (lawnmowers, saws, forklifts)
- ☐ Use tools
- ☐ Drive buses, vans, taxis
- ☐ Prepare meals for large groups
- ☐ Build things
- ☐ Cut down trees
- ☐ Give haircuts or style hair
- ☐ Take care of cars
- ☐ Other _____

LEARNING STYLE INVENTORY

To better understand how you prefer to learn and process information, place a check in the appropriate space after each statement below, then use the scoring directions at the bottom of the page to evaluate your responses. Use what you learn from your scores to better develop learning strategies that are best suited to your particular learning style. This 24- item survey is not timed. Respond to each statement as honestly as you can.

	Often	Sometimes	Seldom
1. I can remember best about a subject by listening to a lecture that includes information, explanations and discussions.			
2. I prefer to see information written on a whiteboard and supplemented by visual aids and assigned readings.			
3. I like to write things down or to take notes for visual review.			
4. I prefer to use posters, models, or actual practice and other activities in class.			
5. I require explanations of diagrams, graphs, or visual directions.			
6. I enjoy working with my hands or making things.			
7. I am skillful with and enjoy developing and making graphs and charts.			
8. I can tell if sounds match when presented with pairs of sounds.			
9. I can remember best by writing things down.			
10. I can easily understand and follow directions on a map.			
11. I do best in academic subjects by listening to lectures and tapes.			
12. I play with coins or keys in my pocket.			
13. I learn to spell better by repeating words out loud than by writing the words on paper.			
14. I can understand a news article better by reading about it in a newspaper than by listening to a report about it on the radio.			
15. I chew gum, smoke or snack while studying.			
16. I think the best way to remember something is to picture it in your head.			
17. I learn the spelling of words by "finger spelling" them.			
18. I would rather listen to a lecture than read about the same material in a textbook.			
19. I am good at working and solving jigsaw puzzles and mazes.			
20. I grip objects in my hands during learning periods.			
21. I prefer listening to the news on the radio rather than reading the paper.			
22. I prefer obtaining information about an interesting subject by reading about it.			
23. I feel very comfortable touching others, hugging, handshaking, etc.			
24. I follow oral directions better than written ones.			

SCORING PROCEDURES

Directions: Place the point value on the line next to the corresponding item below. Add the points in each column to obtain the preference score under each heading.

OFTEN=5 POINTS

SOMETIMES=3 POINTS

SELDOM=1 POINT

VISUAL	
No.	PTS.
2	
3	
7	
10	
14	
16	
19	
22	

AUDITORY	
No.	PTS.
1	
5	
8	
11	
13	
18	
21	
24	

TACTILE	
No.	PTS.
4	
6	
9	
12	
15	
17	
20	
23	

VPS =
VPS = Visual Preference

APS =
APS = Audio Preference

TPS =
TPS = Tactile Preference

SOUND: Hints for the Auditory Learner

General

1. Say aloud the information to be learned/have someone read the information to you/read it into a tape recorder and replay it.
2. Read your work out loud. Summarize what you have read on tape.
3. Say words inside your head silently.
4. Brainstorm ideas with others. Form study groups.
5. When possible, learn information through tapes, television, oral reports, rhymes and songs, radio, lectures, book reviews, panel and group discussions, guest lectures, and oral questions and answers.
6. Use a straight-edge marker or guide to assist you in keeping your place while you are reading or working with printed materials.
7. Tape class lectures (Ask instructor for permission).
8. Meet with classmates before and/or after class to discuss material.

TOUCH: Hints for the Tactile/Kinesthetic Learner

1. Keep your desk clear of distracting objects.
2. Cover the page you're not reading.
3. If you are distracted by noise, turn off the radio; wear earplugs or wear an earphone in the learning center to block out the noise. If you want sound, listen to soft music.
4. Divide your work into short study sessions. Get a timer. After 20 minutes or when a task is completed, give yourself a reward, a cookie, a walk around the block, listen to one song, etc.
5. Sit as close to the teacher as possible, or sit in the center of the room by quiet students.
6. When studying, use a multi-sensory approach (hearing, seeing, touching and doing) as much as possible.
7. Get plenty of sleep.
8. Eat a nutritious breakfast and lunch. Snack on fruit or nutritional food if you need extra energy.
9. Study in a carrel or in an office where there is a desk for your text books and notebook.
10. Use models, real objects, and materials that can be touched and moved. For example, learn geography through handling and studying a globe.
11. When possible draw what you are learning.
12. Trace spelling words as you practice them.
13. Record in writing information learned. Keep a supply of paper on hand.
14. When possible, role play, type, take notes, or construct models to learn the information.

SIGHT: Hints for the Visual Learner

General

1. Take notes, make pictures, graphs, and charts. Use flashcards and highlight key details
2. Sit close to the teacher so that you can watch his /her face and gestures.
3. Take notes or make lists as you listen to directions.
4. Carefully check instructions written on the chalkboard and on handouts.
5. As the teacher lectures, pay attention to visual aids such as the following:
 - Drawing, maps, graphs, charts
 - Transparencies, posters, films, books
6. Imagine pictures of the information you are supposed to remember.
7. Use color coding as cues to important information.
8. When possible, read assignments silently.
9. Maintain class notes and outlines of important information to study.
10. Try to read and study in a well lit, quiet place.
11. Record homework assignments in a date book, on a note pad, or a specially designed assignment sheet.
12. Keep a note pad with you at all times. Write out everything for frequent and quick visual review.

Reading

1. Use sight words, flashcards, note cards and experience stories; don't try to sound words out, but try to determine if the new word or words has words you already know. For example, the "systematic" has the word "system", "stem" and "mat" within it.
2. You are a "look-and-say" learner. Look at a word carefully; then say it.

Tips for Visual Learners

If you are a visual learner, you will learn best when information is presented in the form of a graph, chart, picture or text on a page or screen. You need to see the information.

To increase your chances of memorizing information, find a way to test yourself with visual clues. Flash cards work well for visual learners especially if you introduce color coding and images with the words. For example, say you need to memorize a bunch of medical terms. Create flash cards that have the term on one side plus an image. On the other side of the card, define the term. When you work through the pile - look at the image/term and ask yourself the definition. If you get it right, put it in the right pile. If you get it wrong, put it in the wrong pile. Once you are through the pile, take the wrong pile and cycle through it creating new right and wrong piles. Continue to work through the wrong pile until it doesn't exist anymore i.e. they are all in the right pile!

Color coding is also a great tool for visual learners. Introduce color wherever you can to help you retain information and stay organized. There are many wonderful colorful office supplies that could really add to your efficiency and information retention.

To work through a problem, especially one with sequential steps, creating a flow chart will help your brain sort out the best solutions. Another problem solving and idea processing tool is a mind map. Mind mapping documents a flow of ideas that branch from the central issue. Checklists are another helpful tool to organize visual learners.

Tips for Auditory Learners

If you are an auditory learner, you will learn best when information is presented in a lecture, teleconference or presentation. You need to hear the words to understand them. You'll remember a person's voice more than their appearance or name on a piece of paper.

To increase your chances of memorizing information, read it out loud or have someone else read it to you. Talking books are designed for the visually impaired or for those who want to learn as they drive but they are also great for auditory learners. Another memory tool for auditory learners is to create songs or jingles containing the information you need to memorize.

Recording devices are must have learning tools for auditory learners. Use a voice recorder to practice or create an auditory record of information you need to learn. Voice recorders are also handy for recording ideas, solutions to problems and new strategies. Videos will also help you learn, not the pictures, but the sound track.

To work through problems, you may catch yourself talking about it to friends, family or anyone who will listen. You love brainstorming sessions and discussions as they help you to understand the issues and creatively problem solve.

Choose training that is presented as lectures or teleconferences. Record lectures for future play back and review. Coordinate and/or participate in study groups where you discuss the concepts you are learning.

Tips for Kinesthetic and Tactile Learners

If you are a kinesthetic learner, you will learn best when learning takes the form of doing. You need to get your hands dirty and dive right in order to grasp the new concept.

To increase your chances of memorizing information, find a way to make your learning more active. Creating or using games, computer software, puzzles and other hands-on activities will help you to learn through doing. Like visual learners, drawing flow charts and mind maps are useful tools but it is the act of creating them that will cause learning, not the visual tool in the end.

Experimentation is how kinesthetic learners learn. They try things using past experience as a foundation and see how it turns out. If you learn kinesthetically, introduce experimentation where possible and learn from any mistakes. Taking calculated risks is where you'll shine.

Avoid lectures and look for online learning opportunities, especially online courses that utilize multi-media interactivity such as self-assessment quizzes. If you do choose in-person training, look for classes that have labs or other active forms of training (simulations, projects etc.).

Keeping organized may a big challenge for you as your priority is to keep doing, not to stop and organize. Try to find ways to make your organization active. Purchase filing cabinets on wheels, label makers, sorting systems/supplies and create databases to store valuable information. Form and color are not as important to you as function is so look for office supplies and tools that are designed to be highly functional.

http://www.suite101.com/blog/joni188/tips_for_visual_learners

Attendance & Punctuality					
Attendance	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Understanding work expectations for attendance and adhering to them. Notifying supervisor in case of absence. Completing any required paperwork.	Excessive absences. Insufficient notice provided. Some or all of absences are unexcused.	Below 90% attendance. Usually provides advance notice of absence. Most absences are for valid reasons in accordance with employer policy.	Maintains 90% attendance; notifies supervisor ahead of time prior to absence. Any absences are for valid reasons in accordance with employer policy.	Perfect attendance (no absences, including excused).	
Punctuality	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Understanding work expectations for punctuality and adhering to them. Arriving on time for work, taking and returning from breaks and meals on time, and calling supervisor prior to being late.	Excessively late for start of work and returning from breaks/meals. No notice provided in advance of tardy arrival/return.	Inconsistent in arriving to work, returning from breaks on time, and calling supervisor to provide notice.	Arrives to work and returns from breaks on time with only rare exceptions. If late, notifies supervisor ahead of time.	Perfect or near-perfect in arriving for work and returning from breaks on time. Model for other workers.	
Workplace Performance					
Performance	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Completes tasks accurately and on time. Quality and quantity of work product meets or exceeds expectations.	Tasks are rarely completed accurately or on time. Quality and quantity of work product is consistently substandard. Additional training needed.	Inconsistent in meeting standards around work quality and quantity.	Quality and quantity of work usually meets expectations.	Quality and quantity of work often exceeds expectations.	
Effort & Productivity	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Pursues work with energy, drive, and intent to accomplish tasks. Fulfills or exceeds expectations around timely completion of tasks.	Easily distracted from task at hand. Rarely completes tasks on time without supervisor intervention.	Inconsistent in dedication to, and focus on, assigned tasks. Timeliness of completion cannot be depended upon.	Usually pursues work with energy and drive. Regularly completes tasks within designated timeframe.	Consistently pursues work with energy and drive. Often exceeds expectations around timely completion of tasks.	

Compliance	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Complying with rules, policies, and procedures, including those related to health and safety. Following written and verbal directions.	Consistently fails to follow directions or violates workplace policies and procedures. May be risking safety of self or colleagues.	Inconsistent in following directions or complying with workplace policies or procedures.	With few exceptions, follows directions and complies with workplace policies and procedures.	Consistently follows directions and complies with workplace policies and procedures. Is proactively aware of safety issues and seeking to ensure a safe work environment.	
Responsibility	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Demonstrating dependability and reliability. Fulfilling obligations, completing assignments, and meeting deadlines. Acting with integrity and honesty/.	Cannot be depended upon to fulfill obligations and/or behave ethically.	Inconsistent in demonstrating dependability, ability to fulfill obligations, and integrity.	With rare exception, can be relied upon to fulfill obligations and act with integrity.	Consistently demonstrates dependability and exceeds expectations in regards to obligations. Can be trusted. Limited, if any, supervision necessary.	
Initiative	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Engaging in task or activity from commencement to completion. Asking appropriate questions. Identifying, or seeking out assignment of, new task upon completion of prior one.	Reluctant or unable to begin tasks without supervision. Needs frequent reminders of assigned responsibilities.	Inconsistently begins or remains on task. Needs occasional prompting. Often satisfied with bare minimum performance.	Usually begins and remains on task until completion. Can work independently. Upon completion, initiates interaction requesting next assignment.	Consistently begins /remains on task until completion. Regularly identifies and begins or initiates interaction requesting next task. Can work independently.	

Skill Development	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Demonstrating a willingness to learn and consider new ways of doing things. Proactively seeking out opportunities for the development of new skills.	Fails to identify or participate in opportunities to gain knowledge and new skills. Repeatedly performs tasks in a manner that is incorrect, inefficient, or unsafe.	Participation or engagement in skill development opportunities is inconsistent. Does not proactively seek out opportunities for on-the-job skill building.	Actively participates in skill development opportunities. Identifies or seeks out opportunities for learning and skill-building.	Consistently demonstrates willingness to learn and consider new ways of doing things. Seeks out opportunities to gain new skills or knowledge.	
Critical Thinking	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Identifying and defining a problem, using knowledge and information to generate possible solutions. Effectively managing time to complete tasks.	Makes little or no effort to use reasoning or knowledge to solve workplace problems. Needs guidance to resolve any little issue or challenge.	Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement.	Uses sound reasoning, and job knowledge to solve workplace problems.	Consistently applies sound reasoning to solve work problems. Identifies and troubleshoots potential problems before they can occur.	
Workplace Appearance					
Attire	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Dressing appropriately for position and duties. If relevant, all components of uniform are clean and being worn appropriately.	Has not yet demonstrated appropriate appearance for position and duties. Clothing is not clean or workplace-appropriate. If applicable, regularly forgets uniform components.	Inconsistent in demonstrating appropriate appearance for workplace. Clothing may not always be clean or appropriate. May sometimes be missing uniform components.	Usually dresses appropriately for position and duties. Clothing/uniform is clean and worn appropriately.	Consistent display of professional appearance in accordance with position and duties.	

Grooming	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Practicing personal hygiene appropriate for position and duties.	Has not yet complied with policy regarding personal hygiene appropriate for workplace, position, or duties.	Inconsistent in demonstrating appropriate personal hygiene for workplace or role.	Usually grooms and practices hygiene appropriate for position and duties.	Consistently meets or exceeds expectations in regards to professional grooming and hygiene.	
Communication & Attitude					
With Peers	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Communicating effectively – verbally and non-verbally. Using language appropriate for work environment. Maintaining respectful and trustworthy relationships.	Repeatedly uses inappropriate language for the workplace and/or is in conflict with peers. Is not often clear or accurate in conveying or understanding information.	Inconsistent in communicating in manner and language appropriate for workplace. Does not consistently speak clearly or accurately convey information.	Usually uses workplace appropriate language and tone. Listens attentively. Accurately and understandably conveys information.	Consistently communicates in tone and manner appropriate for workplace. Can be counted upon to listen attentively and speak clearly. Can effectively present to a group.	
With Supervisors	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Respecting authority. Accepting instruction and constructive criticism. Speaking clearly and communicating effectively and appropriately for the work environment, both verbally and non-verbally.	Reluctant to accept feedback and constructive criticism from supervisor. Responds inappropriately or with poor verbal or non-verbal communication.	Inconsistent in constructively accepting direction and feedback from supervisor. Does not consistently demonstrate good verbal or non-verbal communication.	Usually accepts direction and feedback from supervisors with positive attitude. Uses feedback to improve work performance. Good and professional verbal and nonverbal communicator.	Consistently accepts direction and constructive criticism with positive attitude. Uses feedback to improve work performance. Communication skills exceed expectations.	
With Public / Customers	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
(If relevant) Communicating and behaving appropriately as a representative of employer. Recognizing and prioritizing customer needs.	Verbal or non-verbal communication is inappropriate for role and setting. Information conveyed is rarely accurate.	Does not consistently strike the correct tone in communications. Does not always convey accurate or sufficient information.	With rare exception, maintains a friendly and professional demeanor. Usually communicates appropriate and accurate information in intelligible manner.	Consistently demonstrates a positive rapport with public or customers. Listens well. Is articulate and accurate in conveying relevant information.	

Teamwork & Cooperation	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Relating positively with co-workers. Encouraging others. Working productively with individuals and teams.	Has not yet demonstrated appropriate group behaviors. Improvement needed in treating others with respect. Rarely contributes to group efforts.	Inconsistent in promoting positive group behaviors amongst coworkers, and in contributing to group efforts.	Usually works well with co-workers, is respectful, and contributes to group efforts with rare exception. Respects diversity within the workplace.	Consistently facilitates positive group dynamics. Demonstrates leadership that plays a significant role in success of group efforts. Promotes larger group unity.	
Conflict Mitigation	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Using appropriate strategies and solutions for dealing with or diffusing workplace differences. Ensuring that they don't affect productivity or work quality.	Does not diffuse and, occasionally escalates, workplace differences.	Inconsistent in seeking to diffuse workplace differences.	Usually seeks to diffuse differences using appropriate strategies and solutions. Tries to prevent differences from affecting productivity.	Consistently seeks to use appropriate strategies for dealing with or diffusing workplace differences. Does not let differences affect productivity.	
Positivity	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Conveying a positive, pleasant, and "can-do" attitude.	Regularly displays a negative attitude that inhibits productivity of self or team.	Inconsistently displays a positive, constructive attitude. Occasional negativity may affect productivity and performance.	Usually conveys a positive and constructive attitude.	Consistently demonstrates a positive and "can-do" attitude in interactions with peers, supervision, and public/customers.	
Motivation	Unsatisfactory (1)	Inconsistent (2)	Proficient (3)	Exemplary (4)	RATING
Trying to continuously improve performance.	Does not demonstrate interest in or commitment to achieving performance above minimal standards.	Irregularly seeks out opportunities and feedback that can contribute to improving performance. Does not consistently apply.	Regularly seeks out opportunities and feedback that can contribute to improving performance. Tries to apply lessons learned.	Has tried and succeeded at continuously improving workplace performance.	

Category: Work Ethic and Professionalism

Skill	Expectation	Self Assessment				
Attendance and Punctuality	Showing up in a timely manner prepared for work	1	2	3	4	5
	Providing sufficient notice if unable to report for work	1	2	3	4	5
Workplace Appearance	Dressing appropriately for position and duties	1	2	3	4	5
	Practicing personal hygiene appropriate for position and duties	1	2	3	4	5
Accepting Direction and Constructive Criticism	Accepting direction and feedback with positive attitude through appropriate verbal and non-verbal communication skills	1	2	3	4	5
	Displaying willingness to work in a cooperative manner	1	2	3	4	5
Motivation and Taking initiative	Participating fully in task or project from initiation to completion	1	2	3	4	5
	Initiating interaction with supervisor for next task or project upon successful completion of previous one	1	2	3	4	5
Understanding Workplace Culture, Policy and Safety	Demonstrating understanding of workplace culture and policy	1	2	3	4	5
	Complying with health and safety rules for the specific workplace	1	2	3	4	5
	Respecting confidentiality and exhibiting understanding of workplace ethics	1	2	3	4	5

Category: Communication and Interpersonal Skills

Skill	Expectation	Self Assessment				
Speaking	Speaking clearly	1	2	3	4	5
	Using language appropriate to the environment, both in person and on phone	1	2	3	4	5
Listening	Listening attentively	1	2	3	4	5
	Making and maintaining eye contact appropriate to the workplace culture	1	2	3	4	5
	Confirming understanding	1	2	3	4	5
Interacting with Co-Workers	Relating Positively with co-workers	1	2	3	4	5
	Working productively with individuals and in teams	1	2	3	4	5
	Respecting racial and cultural diversity	1	2	3	4	5

MA Work-Based Learning Plan Foundational Skills

Name _____

Date _____

Rating descriptions

Rating (number)	Rating (name)	Description	What this means to me
1	Performance Improvement Plan needed	Is not yet demonstrating the foundation skills required for the position and needs to have a formal plan for improving skills and performance	<i>I'm still learning and I need some help to get where I need to be</i>
2	Needs Development	Beginning to demonstrate and develop the foundation skills required for the position	<i>I'm still learning, but I can do what I need with only a little help</i>
3	Competent	Demonstrates foundation skills required for the position	<i>I can handle it, but I'm not ready for new challenges in this area; I might just be content where I am</i>
4	Proficient	Consistently demonstrates foundation skills required for the position and shows initiative in improving own skills	<i>I got this, and I'm moving forward however I can. I'm always looking for something else to do and something else to learn</i>
5	Advanced	Consistently demonstrates the foundation skills required for the position and shows initiative in improving own skills and using these skills to support the work of the organization	<i>I'm so good at this you can trust me to train the newcomers. I am a model employee.</i>

GOALS, VALUES AND EXPECTATIONS

July/August 2023

Roxbury Center for Working families, Bridge to Culinary Training Program

Goals:

By the end of the Bridge to Culinary program students will be able to:

- Demonstrate growth in customer service skills and knowledge.
- Build a comprehensive and appropriate resume.
- Display and demonstrate improved job readiness skills.
- Show competent basic computing and culinary math skills.
- Prepare for interviews with more confidence and enhance interviewing skills.
- Explain and understand the basic employer requirements, terminology, and background of Boston's hospitality industry.

Values:

Students will demonstrate the following values at all times while in the program:

- Respect and value others
- Be accountable
- Engage and embrace diversity
- Work hard and have fun
- Strive to learn

Expectations:

Students will be expected to abide by the following requirements:

- No cell phone usage in class
- Attend every class
- Be on time and punctual

These goals, values, and expectations can be amended at any time by the Bridge to Culinary staff in order to maintain the integrity and mission of the program.

By signing below you acknowledge you understand and will abide by these values and expectations.

Name: _____

Name: Kelly Folsom (Instructor)

Signature: _____

Signature: _____

Date: _____

Date: _____



EMS Track Training: Program Expectations Contract

You have been selected to participate in the City Academy Emergency Medical Technician Training, a program partnership between the Mayor's Office of Workforce Development and Boston Emergency Medical Services. As a participant, you are expected to follow the below guidelines as you progress through the program:

- **Attendance and Punctuality:** This is a crucial part of your success in the program and in your future career. Participants are expected to attend each Bridge Course class on time without *any* absences. In the event of an emergency, such as medical or childcare issues, you will be required to provide documentation and attend a make-up class. Participants experiencing more than one emergency will likely not be invited to progress to the next step of the program.
- **Drug Testing:** All Participants are subject to randomized drug tests at any time throughout the program. Non-compliance with Boston EMS' drug policy will be cause for termination from the City Academy EMT training program.
- **Professional Behavior and Good Citizenship:** As a Participant you are representing the City Academy Training program and the City of Boston department partners, as such, you are expected to behave in a professional manner anytime you are participating in City Academy activities. This includes, but is not limited to: courteous language, appropriate conversations, treating others with respect and dignity (including fellow participants, instructors and all those you may interact with in the course of the training) and maintaining a neat and clean appearance. Please be advised that you serve as an ambassador of City Academy even during non-program times. Behavior and/or activities that may be criminal, willfully negligent or demonstrate any negative public engagement that is contrary to the City of Boston's dedication to service and goodwill may also be considered as grounds to cease participation in the program.
- **Participation:** All Participants are expected to participate in classroom discussion, complete assignments and put their best effort into each day's work.
- **Program Progress:** Your performance in each phase of the training will determine your potential for advancing to the next phase of the program including, but not limited to, the expectations outlined here.

Release of information: City Academy Staff and Boston EMS Staff will share information about Participant's progress in the training, including the Bridge course, internship, Boston EMS EMT-Basic Course and the Recruit Academy. **Please initial here as acknowledgement of this:** _____

Applicant's Full Name (Printed)

Applicant's Signature

Office of Workforce Development Staff's Signature

Date

17

property to change their attire, to meet Highgate Hotels' policy of tailored, professional and conservative attire. If an associate is requested to leave the property to change, this time will be unpaid.

Management will discuss exceptions to the dress code policy as a reasonable accommodation for sincerely held religious beliefs. Any associate that believes that this appearance policy interferes with a sincerely held religious belief should contact Human Resources.

Non-Solicitation/Distribution

In order to maintain and promote efficient operations, Highgate Hotels has established rules, which govern both solicitation and the distribution of written or printed material. Failure to obey these rules may result in corrective action, up to and including immediate termination. Any associate who is in doubt concerning the application of these rules should consult with his/her Supervisor or the Human Resources department. Nothing herein is intended to abrogate rights inuring under the NLRA and CBA.

- No associate shall solicit or promote support for any cause or organization during his/her working time or during the working time of the associate or associates to whom such solicitation activity is directed.
- No associate shall distribute or circulate any written or printed material during his/her working time or during the working time of the associate or associates to whom such activity is directed, or in work areas at any time.
- Non-associates may not solicit or distribute any written or printed material on Company property at any time.

Working time is the time an associate is expected to be performing job duties and does not include meal times or break periods. These rules are established for the purpose of preventing interference with work duties and apply to associates engaged in the solicitation or distribution as well as to associates being solicited or receiving distributions.

These rules do not apply to activities that are part of an associate's regular job duties or that are necessary to carry out such job duties. These rules do not apply to Company-authorized charitable solicitations such as the annual United Way and blood drives. No merchandise, other than approved by Highgate Hotels, may be sold or distributed on Company premises.

Drug-Free Workplace

Highgate Hotels is committed to encouraging optimum productivity and protecting its associates from accident, injury, and property damage, including incidents that may result because an individual's faculties are impaired from the use of alcohol, drugs, or any controlled substance, legal or illegal. Highgate Hotels has, therefore, adopted the following policies:

- All associates are prohibited from being under the influence of alcohol, illegal drugs, or legal drugs which are unlawfully obtained or used, when reporting for work, during working hours, while conducting Company business or on Company property (defined as: buildings, facilities, parking areas, and/or vehicles owned, operated, or leased by the Company and/or all places where the Company conducts business).
- The use, sale, transfer, possession, manufacture, or dispensing of any illegal drugs or alcoholic beverages on Company property or anywhere while conducting Company business or activities is strictly prohibited.
- The use or possession of prescription drugs which have been illegally obtained, or are intended for another person, or are used in a manner, combination, or quantity other than as prescribed by a licensed medical/dental practitioner, or the abuse or misuse of over-the-counter drugs is strictly prohibited.
- Any associate who is taking medication that may affect his/her ability to work safely must notify the appropriate Human Resources representative. Associates who suffer the effects of substance abuse are encouraged to seek assistance before engaging in conduct, which would be a violation of Company policy. Please refer to the additional Drug Free Work Place document outlining this policy in detail, which can be found in your new hire paperwork.

Violation of this policy will subject an associate to disciplinary action, up to and including immediate termination. Discipline may be based not only on a violation of this policy, but also on prior poor performance, workplace misconduct, or other rule violations as determined by the Company.

Use of Communications Devices

All Company communications services and equipment, including the messages transmitted or stored by them, are the sole property of the Company. Associates have no expectation of privacy when using Company communication devices or the Company's electronic communication systems.

18

- The Company will access and monitor associate communications and files as it considers appropriate. Communications equipment and services include – but are not limited to – mail, electronic mail, courier services, facsimiles, telephone systems, computer networks, internet, on-line services computer files, video equipment, pagers, two-way radios, cellular phones, and bulletin boards (herein referred to as "Communication Devices").
- Personal cell phones, laptops, smartphones or other similar communication devices should be used with discretion during work hours and should be stored in lockers or other secured areas. When on break, associates are allowed to use these items in break rooms and designated smoking areas only.
- Company communications services and equipment for personal purposes should be limited and reserved for emergencies or when extenuating circumstances warrant it. The associate pay phones should be used for all personal telephone calls.
- To maintain the security of our premises and the confidentiality of our trade secrets, processes and customers' information, associates are prohibited from using communication devices that have the capability of taking photographs during working time or in work areas.
- Hotel and public phones are restricted to business and guest use only.
- Communication Devices that have the capability of taking photographs must not be used for photography on Company property.
- Incoming personal telephone calls should not occur while you are on duty. Please ask family members and friends not to phone while you are on duty unless it is an extreme emergency. Emergency calls will be directed to your Human Resources representative.
- Company communications property or equipment may not be removed from the premises without written authorization from the associate's Supervisor.
- You should exercise care so that no personal correspondence appears to be an official communication of the Company. You may not use the Company stationery for personal letters. If you must use the Company's address for receiving personal mail, you must have permission from your applicable Senior Leader.
- You are prohibited from making your own audio recordings of any work place conferences, meetings or discussions.
- Associates should have no expectation of privacy in using Company network, communications services and/or equipment.
- Improper use of Company Communication Devices or unauthorized use of personal communication or recording equipment may result in disciplinary action up to and including termination.

Use of Personal Electronic Devices

- Personal electronic devices such as mobile telephones, e-readers, or tablets may not be used while working unless required for business purposes. It is a violation of the Company's policy to record conversations with a tape recorder or other recording device (including a cell phone or any electronic device) unless prior approval is received from your supervisor. The purpose of this policy is to eliminate a chilling effect to the expression of views that may exist when one person is concerned that his/her conversation with another is being secretly recorded. This concern can inhibit spontaneous and honest dialogue, especially when sensitive or confidential matters are being discussed. Violation of this policy may result in disciplinary action, up to and including termination. Nothing in this policy is intended to interfere with associates' Section 7 rights.

Use of Cell Phones/Other Electronic Devices While Driving

This policy provides standards for safe use of cell phones and other electronic communication devices (blackberries, and other handheld devices) by associates when operating Company vehicles, leased or rented vehicles, or personal vehicles while conducting Company business. Associates must adhere to all federal, state, and local rules and regulations regarding the use of cell phones and other handheld electronic devices when driving on Company time, for Company purposes, and/or within a Company vehicle. Associates must not use cell phones or other handheld electronic devices if such conduct is prohibited by state or local law. Please check with the Human Resource Department if you are unsure as to whether cell phones or other handheld electronic devices may be used in your particular state.

Associates should not use handheld cell phones or other handheld electronic devices for any purpose when driving on Company time for Company purposes and/or within a Company vehicle. If an associate needs to make or receive a call while driving, the associate should make or receive the call only after parking in a lawfully designated area. If an associate has a hands-free device that allows the associate to talk on a cell phone or other electronic device, the associate may make and receive calls using the hands-free device, but such calls should be limited to five minutes or less. Associates are strictly prohibited from texting, e-mailing, surfing the internet, or otherwise using any other electronic communication device while driving on Company time, for Company purposes, and/or within a Company vehicle.

19

You Can Grow Your Intelligence

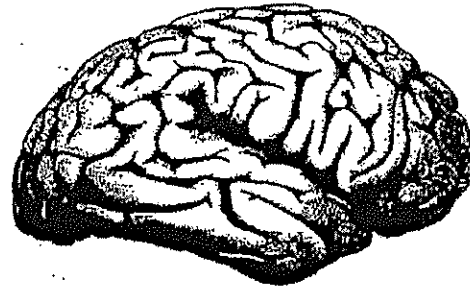
New Research Shows the Brain Can Be Developed Like a Muscle

Many people think of the brain as a mystery. They don't know much about intelligence and how it works. When they do think about what intelligence is, many people believe that a person is born either smart, average, or dumb--and stays that way for life.

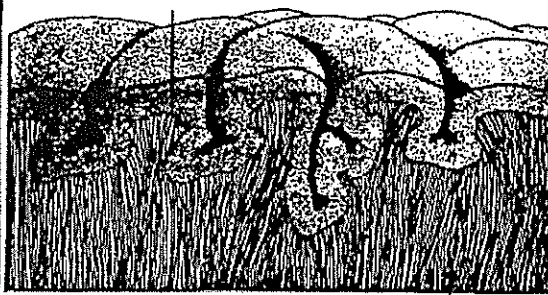
But new research shows that the brain is more like a muscle--it changes and gets stronger when you use it. And scientists have been able to show just how the brain grows and gets stronger when you learn.

Everyone knows that when you lift weights, your muscles get bigger and you get stronger. A person who can't lift 20 pounds when they start exercising can get strong enough to lift 100 pounds after working out for a long time. That's because the muscles become larger and stronger with exercise. And when you stop exercising, the muscles shrink and you get weaker. That's why people say "Use it or lose it!"

But most people don't know that when they practice and learn new things, parts of their brain change and get larger a lot like muscles do when they exercise.

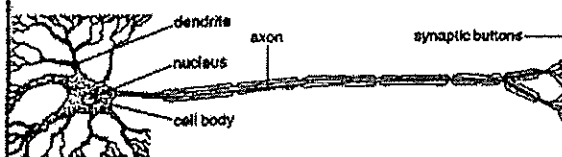


Inside the cortex of the brain are billions of tiny nerve cells, called neurons. The nerve cells have branches connecting them to other cells in a complicated network. Communication between these brain cells is what allows us to think and solve problems.



A Section of the Cerebrum nerve fibers (white matter)

When you learn new things, these tiny connections in the brain actually multiply and get stronger. The more that you challenge your mind to learn, the more your brain cells grow. Then, things that you once found very hard or even impossible to do—like speaking a foreign language or doing algebra—seem to become easy. The result is a stronger, smarter brain.



A Typical Nerve cell

How Do We Know the Brain Can Grow Stronger?

Scientists started thinking that the human brain could develop and change when they studied animals' brains. They found out

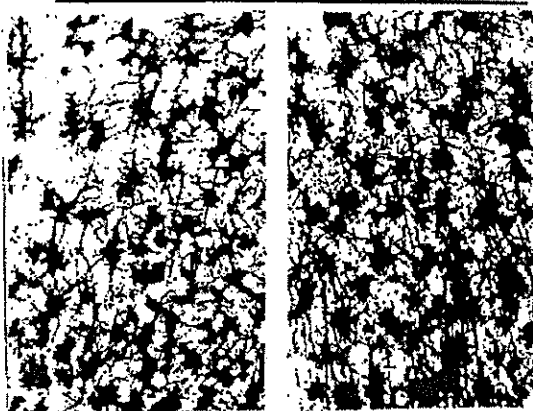
that animals who lived in a challenging environment, with other animals and toys to play with, were different from animals who lived alone in bare cages.

While the animals who lived alone just ate and slept all the time, the ones who lived with different toys and other animals were always active. They spent a lot of time figuring out how to use the toys and how get along with the other animals.

These animals had more connections between the nerve cells in their brains. The connections were bigger and stronger, too. In fact, their whole brains were about 10% heavier than the brains of the animals who lived alone without toys.

The animals who were exercising their brains by playing with toys and each other were also "smarter"—they were better at solving problems and learning new things.

Even old animals got smarter and developed more connections in their brains when they got the chance to play with new toys and other animals. When scientists put very old animals in the cages with younger animals and new toys to explore, their brains grew by about 10%!



Nerves in brain of animal living in bare cage.

Brain of animal living with other animals and toys.

Children's Brain Growth

Another thing that got scientists thinking about the brain growing and changing was babies. Everyone knows that babies are born without being able to talk or understand language. But somehow, almost all babies learn to speak their parents' language in the first few years of life. How do they do this?

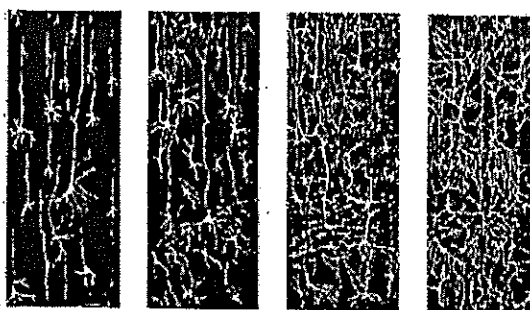
The Key to Growing the Brain: Practice!

From the first day they are born, babies are hearing people around them talk—all day, every day, to the baby and to each other. They have to try to make sense of these strange sounds and figure out what they mean. In a way, babies are exercising their brains by listening hard.

Later, when they need to tell their parents what they want, they start practicing talking themselves. At first, they just make goo-goo sounds. Then, words start coming. And by the time they are three years old, most can say whole sentences almost perfectly.

Once children learn a language, they don't forget it. The child's brain has changed—it has actually gotten smarter.

This can happen because learning causes permanent changes in the brain. The babies' brain cells get larger and grow new connections between them. These new, stronger connections make the child's brain stronger and smarter, just like a weightlifter's big muscles make them strong.



Newborn 3months 15 months 2 years

Development of nerve cells in the brain from birth to 2 years old. The nerve cells grow both in size and in number of connections between them.

The Real Truth About "Smart" and "Dumb"

No one thinks babies are stupid because they can't talk. They just haven't learned how to yet. But some people will call a person dumb if they can't solve math problems, or spell a word right, or read fast--even though all these things are learned with practice.

At first, no one can read or solve equations. But with practice, they can learn to do it. And the more a person learns, the easier it gets to learn new things--because their brain "muscles" have gotten stronger!

The students everyone thinks is the "smartest" may not have been born any different from anyone else. But before they started school, they may have started to practice reading. They had already started to build up their "reading muscles." Then, in the classroom, everyone said, "That's the smartest student in the class."

They don't realize that any of the other students could learn to do as well if they exercised and practiced reading as much. Remember, all of those other students learned to speak at least one whole language already--

something that grownups find very hard to do. They just need to build up their "reading muscles" too.

What Can You Do to Get Smarter?

Just like a weightlifter or a basketball player, to be a brain athlete you have to exercise and practice. By practicing you make your brain stronger. You also learn skills that let you use your brain in a smarter way--just like a basketball player learns new moves.

But many people miss out on the chance to grow a stronger brain because they think they can't do it, or that it's too hard. It does take work, just like becoming stronger physically or becoming a better ball player does. Sometimes it even hurts! But when you feel yourself get better and stronger, all the work is worth it!

E-mail questions or comments to:
Growyourbrain@aol.com

BrainWize – Brain Growth Research

Here are descriptions of some different research students that all showed how learning changes the brain.

Babies' Brains: Newborn babies have plenty of neurons, but the cells have very few connections between them. Because they are learning so much in their first few years, babies develop many new connections between their brain cells. By the time you become an adult you will have a trillion or more of these connections!

Clever Cabbies: London cabbies have to learn the locations of many different places, because their streets don't have numbers. Researchers measured the hippocampus – the area of the brain that remembers information about places – in London cabdrivers and compared them to other people's. The cabbies' were bigger, and the longer they were on the job, the bigger this area of the brain became! This shows that learning and practicing this skill made that area of their brain grow.

Learning Languages: Most people think that learning a second language once you are an adult is very hard. But researchers had adults use special exercises to practice hearing different sounds. Using a PET scan to measure the activity in the brain, the researchers found that when people did the special exercises, areas of their brains that they had never used before became active. This shows that you can retrain your brain and develop new abilities all through your life.

Musical Mastery: When people play an instrument, they use a special area of the brain to coordinate the movement of their fingers. Researchers found that when the people practiced playing an instrument, the area of the brain that controls the fingers grew larger! This shows that when you learn and practice a new skill, you can build up that area of the brain.

New Neurons: Scientists used to think that we had a fixed amount of brain cells and that we could never grow new ones. But in the past decade, research has shown that the brain grows new cells every day! The cells are grown in the hippocampus, an area important in memory, and they travel to other areas of the brain. They also found that the brain grows more new cells when you are learning new information and skills! So, by learning and practicing, you actually add brain cells as well as new connections.

Remarkable Rats: Twin rats were raised in two different environments: either in a bare cage with food and water, or in a cage with lots of toys and exercise equipment to explore. In the bare cages, the "cage potato rats" just ate and drank and laid around, while in the enriched environment, the "summer camp rats" were busy exploring and learning, exercising their brains. It turned out that the summer camp rats became much smarter than the cage potato rats – they were better at learning new things. And their brains were heavier, too: they had more connections between the neurons in their brains. This research shows that active mental exercise builds up the brain and makes it smarter. Even old rats were able to develop their brains in the enriched environment, proving that you're never too old to grow your brain!

Can you grow your intelligence?

Preliminary Questions: Answer these before you read

1. Write two things you know about the human brain.
2. What do you think about how intelligence is formed? Are you born with it, or can you grow it? Give a reason why you think that.

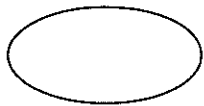
Read the article entitled *You Can Grow Your Intelligence* and answer the following questions. After answering the questions, discuss your answers with a reading partner or group you have been assigned.

3. How does the brain act like a muscle?
4. What allows us to think and solve problems?
5. What causes your brain cells to grow?
6. What made scientists think that human brains could grow and change?
7. What happens inside a child's brain while they learn are learning to speak?
8. OPINION: Do you think some people are born smarter than other people? Discuss your answer with a partner or with your group.
9. Prepare a summary of your discussion to share with the rest of the class. Choose a spokesperson and share out.

Following Directions Activity

Directions: Follow each direction carefully.

1) Circle the animal. Do not write any letters.



ov _____



fr _____



c _____



b _____

2) Write your name on the line.

1, 2, 3, 4, _____, 10

3) Do not answer the question.

What animal barks? _____

4) Answer each addition problem. Leave the subtraction problems blank.

$$\begin{array}{r} 3 \\ - 1 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ + 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ - 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 1 \\ \hline \end{array}$$

5) Circle each type of fruit. Ignore the line between cherry and red.

cherry

gray

elephant

red

banana

green

orange

orange

green bean

yellow

Following Directions Activity

Directions: Follow each direction carefully.

- 1) Write the answer to the following question on the line next to number 4.

Who was the first president of the United States? _____

- 2) Write the answer to the following question on the line next to the first question.

What is the biggest planet? _____

- 3) Find the solution for each addition problem. Do not attempt any subtraction problem.

$7 + 1 =$ _____ $10 - 5 =$ _____ $12 - 3 =$ _____

$2 + 3 =$ _____ $3 + 1 =$ _____ $14 - 6 =$ _____

- 4) Cross out each picture. Write the letter "i" in each blank. _____



b _____ ll



h _____ t



tr _____ ck

- 5) Pick one of the following and fill in the missing word. Your answer will be considered incorrect if you fill in more than one missing word.

Spring, Summer, Fall, _____ North, South, East, _____

Liquid, Solid, _____ First, Second, Third, _____

- 6) Answer the following question, and write your answer below on the line provided. Are all of the symbols in the first column types of punctuation or abbreviations?

? exclamation point

; colon

! question mark

“ semi-colon

: quotation mark

(Answer for number 6)

Common Causes of Conflict in the Workplace

Most conflicts at work fall into one of three overlapping categories: interests, rights, and power.

Interests

Conflicts over interests concern disagreements that affect what people want or need to receive in the workplace. These matters run from general treatment in the workplace to more specific concerns, such as assignments, evaluation, scheduling, promotion, and pay. Conflicts over interests occur among and between employees at all levels across the organization.

Rights

Today, workers enjoy a host of legally protected rights. These rights result from a variety of sources: statutes, regulations, and court decisions. In addition, organizations establish their own systems of internal rights, through policies, procedures, or contractual agreement (e.g., policies regarding dismissal, the application of progressive discipline, the rights of employees who are being disciplined).

Power

Many times in the workplace, conflicts involve a test of power. Merely the use of power can cause conflicts:

- Who has it?
- When should it be used?
- How should it be used?

What Are Your Feelings About Conflict?

What we have learned along the way about how to deal with conflict, along with our past experiences in dealing with conflict, will have a great impact on shaping our ideas and attitudes in the workplace.

Finish the following sentences:

1. The way that we deal with conflict in our home is...
2. When I was growing up, what I learned about conflict is...
3. The way that my friends and family deal with conflict is to...
4. When I'm involved in a conflict, I usually...
5. When I see someone else involved in a conflict, I usually...
6. When people make me angry, I...
7. Conflicts are usually...
8. I think that most people deal with conflict by...
9. The best way to handle a conflict is ...
10. I wish that I could learn...

Conflict Resolution Role Plays

For each of the following situations, you will be asked to role play using the conflict resolution skills you have learned.

Role Play Situation #1: Dealing With the “Back-Stabber”

Role of Trey the “Back-Stabber”:

Trey is just as like his name suggests, determined to get ahead personally by “backstabbing” others. He gossips and spreads little tidbits about everything from your work habits to your personal life that are twisted versions of the truth or outright lies. To make matters worse, he smiles in your face and is friendly and open because he hopes you will reveal some useful material about yourself.

Role of person responding to Trey and the suggested solution:

Do not go to his level—spreading negative rumors—as revenge about him will only lower people's opinion of you and your ability to deal with conflict. No one will remember who started the conflict, and you both will be viewed as petty and untrustworthy. Prove the negative rumors wrong through your abilities and performance. Take the high ground, even though it may seem hard in the beginning.

Role Play Situation # 2: Dealing With the Too Friendly Supervisor

Understanding the role of the Too Friendly Supervisor:

Your supervisor is too friendly and open with all the details of her private life, and she expects you to do the same. Even when you seem uncomfortable hearing about the last fight with her ex or what her doctor said, you wind up sitting in her office way too long, listening to a lot of unwanted information.

Role of the employee and suggested solution:

Recognize that you're not the one being inappropriate, and don't feel that you have to discuss any topics you feel are off limits. Don't encourage her to continue to share personal information by offering advice or asking for more information when she starts telling you personal things. You certainly are not required to answer personal questions. Sometimes a laugh or joke will get the point across.

Tips for Resolving Conflicts with Others

When you are having conflict with someone, consider using the following strategy:

- 1. Identify the problem.** Identify the person with whom you are having trouble. Figure out the specific behavior or attitude that is bothering you and how frequently it occurs.
- 2. Look at the relationships.** Examine how the person interacts with others. Is it similar to the way s/he interacts with you? What makes him/her act that way? Figuring out the causes of someone's behavior helps point the way toward possible solutions.
- 3. Determine the costs.** How does that behavior affect others? Does it cause people to lose morale? Does it affect productivity? Does it make everyone uncomfortable? If no one is affected by the person's behavior, the behavior should be ignored.
- 4. Plan an approach.** Once you identify that the person's behavior does affect you and others, you need to have a discussion with the person. Plan an approach that fits the nature of the problem, the personality of the person involved and your relationship with that person.
- 5. Describe the behavior.** When you do meet with that person, describe the behavior in a non-accusatory manner and explain why it bothers you. Use "I" statements. For example, "Today during the meeting when I was talking about the budget and you interrupted me before I had finished my sentence, I felt really cut down."
- 6. State what you want.** Next, be clear about what you want. "I hope that the next time I talk, I won't get interrupted".
- 7. Seek agreement:** Be sure the person understands, and try to get a commitment to change. "Do you see things the same way that I do?"

Levels of Conflict

Perhaps nothing is said yet. Things don't feel right. It may be difficult to identify what the problem is. Do you feel uncomfortable about a situation, but not quite sure why?

Discomforts

Here a short, sharp exchange occurs without any lasting internal reaction. Has something occurred between you and someone else that has left you upset, irritated or with a result you didn't want?

Incidents

Here motives and facts are often confused or misperceived. Do your thoughts keep returning frequently to the problem?

Misunderstandings

Here relationships are weighed down by negative attitudes and fixed opinions. Has the way you feel about and regard the other person significantly changed for the worse? Is the relationship a source of constant worry and concern?

Tension

Behaviour is affected, normal functioning becomes difficult, extreme gestures are contemplated or executed. Are you dealing with a major event like a possible rupture in a relationship, leaving a job, violence?

Crisis



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Understanding Conflict H III.2

Empathy Blockers

Communication Killers, Fouls!

		Who does it?	
		Self	Other
DOMINATION	<i>Threatening:</i> "If you are not able to get to work on time we'll have to review your job here?", "Do it or else."		
	<i>Ordering:</i> "I'll see you immediately in my office.", "Don't ask me why, just do it because I said so."		
	<i>Criticising:</i> "You don't work hard enough.", "You're always complaining."		
	<i>Name-calling:</i> "Only an idiot would say that.", "You stupid fool." "You're neurotic."		
	<i>"Should"ing or "Ought"ing:</i> "You ought to face the facts.", "You shouldn't be so angry."		
MANIPULATION	<i>Withholding Relevant Information:</i> "If you knew more about this you would see it differently."		
	<i>Interrogating:</i> "How many hours did this take you?" "How much did this cost?" "Why are you so late?" "What are you doing now?"		
	<i>Praising to Manipulate:</i> "You're so good at report writing, I'd like you to do this one."		
	<i>Diagnosing Motives:</i> "You are very possessive." "You've always had a problem with time management."		
DISEMPOWERMENT	<i>Untimely Advice:</i> "I don't seem to be managing." "If you'd just straighten up your desk you would not be in this panic." "Why didn't you do it this way?" "Just ignore him."		
	<i>Changing the Topic:</i> "I'm worried about my son's progress at school". "Yes it is a worry...Did I tell you that I'm applying for a new job?"		
	<i>Persuading with Logic:</i> "There's nothing to be upset about. It's all quite reasonable – we just... then we..."		
	<i>Topping:</i> "I smashed the car last week....." "When I smashed my car..."		
DENIAL	<i>Refusing to Address the Issue:</i> "There's nothing to discuss. I can't see any problems."		
	<i>Reassuring:</i> "Don't be nervous.", "Don't worry, it will work out.", "You'll be fine."		



33

Create Empathy

Listen with your head and your heart.

Empathy is sensing another's feelings and attitudes as if we had experienced them ourselves. It is our willingness to enter another's world, and being able to communicate to that person our sensitivity to them. It is not blind sentimentality; it always retains some objectivity and distance. We do not lose our own identity, though we discover our common humanity.

Create empathy by:

- taking seriously others' needs and concerns
- valuing feelings and attitudes
- respecting others' privacy, experience and values
- listening actively
- encouraging further elaboration and clarification
- using open body language and a warm vocal tone
- reserving judgement and blame
- displaying interest in what others communicate
- withholding unsought advice
- supporting others' attempts to find a solution
- making affirming statements and gestures.

uncovers complex
needs and concerns.

Empathy

encourages
blossoming and growth

improves relationships

supports confidence
and self-knowledge.



Active Listening... Some Helpful Hints

Things to Try

Put the focus of attention totally on the speaker.

Repeat conversationally and tentatively, in your words, your understanding of the speaker's meaning.

Feed back feelings, as well as content. (Probe, if appropriate e.g. *"How do you feel about that?"* or *"How did that affect you?"*)

Reflect back not only to show you understand, but also so the speaker can hear and understand his or her own meaning.

Try again if your active listening statement is not well received.

Be as accurate in the summary of the meaning as you can.

Challenge powerlessness and hopelessness subtly (e.g. try *"It is hopeless"* instead of *"It seems hopeless to you right now."* Try *"You can't find anything that could fix it?"* instead of *"There's nothing I can do"*).

Allow silences in the conversation.

Notice body shifts and respond to them by waiting. Then, e.g. *"How does it all seem to you now?"*

Things to Avoid

Avoid talking about yourself.

Reject introducing your own reactions or well intentioned comments.

Try not to ignore feelings in the situation.

Avoid advising, diagnosing, baiting, reassuring, encouraging or criticising.

Dispense with thinking about what you will say next.

Avoid parroting the speaker's words or only saying *"mm"* or *"ah, hah"*.

Don't pretend that you have understood if you haven't.

Avoid letting the speaker drift to less significant topics because you haven't shown you've understood.

Avoid fixing, changing, or improving what the speaker has said.

Don't change topics.

Resist filling in every space with your talk.

Don't neglect the non-verbal content of the conversation.



Fight, Flight, Flow: Some Behaviours

FIGHT: Aggressive
I win/ You lose

Control, demand.

Punish, reward.

Bulldoze to punish,
to refuse to deal with other's needs
and concerns.

Explode, dumping responsibility on
the other person and denying
ownership of any part of the problem.

Manipulate while appearing to
compromise.

FLIGHT: Passive
I lose/ You win
I lose/ You lose

Submit to another's power.

Resign to the situation.

Withdraw to avoid,
to refuse to deal with
own needs and concerns.

Suppress at least to the other
person, the distress felt.

Surrender own needs in
hasty compromise.

FLOW: Assertive
I win/ You win

Share power or work towards it.

Unfold the opportunity.

Withdraw to consider needs and
concerns of self and others.
Return to address the issue as
appropriate.

Contain discomfort carefully, if you
choose now to deal with it at a more
appropriate time.

Seek agreement which is fair to all
involved.



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The Win/Win Approach H.1.2

Key Features of the Win/Win Approach

GO BACK TO NEEDS.

Concentrate on approach not outcome

- Win/Win solutions are not always possible.
- Maintain an attitude of respect for all parties.
- Be willing to fix the problem.

Focus on the issue

- Hard on the issue, easy on the person
- What are the needs
- What are the concerns

Take a broader perspective

- What are the long-term and short-term consequences of win/lose?
- What are the advantages of win/win?
- Identify many options and develop the ones that give everyone more of what they need.
- Re-define what constitutes a win.
- What can be done to balance a loss?

Make it easy to say yes

- Offer options that are of high value to them and easy for you to give.
- Listen to and acknowledge their needs and concerns.

Support what is legitimate and fair

- Resist greed and injustice.
- Avoid infringing your own and others' rights.

Be persistent

- Take a long term view.
- Maintain dialogue or its possibility.
- Fly win/win flags.

STRENGTHEN YOUR OWN APPROACH RATHER THAN WEAKENING THEIRS.



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The Win/Win Approach H.1.4

37

DATE _____

WellCast

Day Planner



Step 1

Record

WRITE DOWN EVERYTHING YOU DO. YES, WE MEAN EVERYTHING.

7:00 _____	2:00 _____
8:00 _____	3:00 _____
9:00 _____	4:00 _____
10:00 _____	5:00 _____
11:00 _____	6:00 _____
12:00 _____	7:00 _____
1:00 _____	8:00 _____

Step 2

Analyze

PICK YOUR FIVE BIGGEST
TIME WASTERS, AND
ADD UP THE TIME.

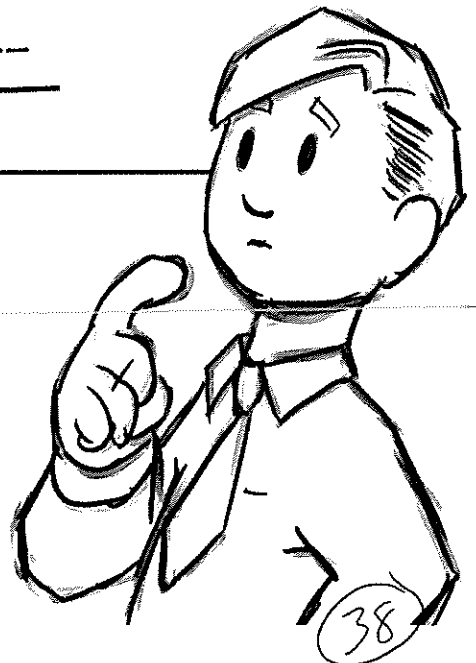
TIME WASTERS	TIME
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
	+ _____

Step 3

Change

GET THAT TIME BACK!
LIST YOUR PRIORITIES AND
RANK THEM IN ORDER
OF IMPORTANCE.

1. _____
2. _____
3. _____
4. _____
5. _____



Managing Time Effectively: How Well Do I Save Time?

Give yourself 2 points for each of the following habits you have.

1. I take advantage of my learning style. I know the strategies that help me to learn best, and I use them.
2. I have a monthly calendar to help me keep track of my activities and responsibilities.
3. I have a weekly calendar to help me keep track of my activities and responsibilities.
4. Every morning, I write down a list of the things I have to do.
5. Any time I feel that there are too many things I have to do, I take a few minutes to sit down and organize myself.
6. When I first get to work, I take a few minutes to figure out the things I have to do that day.
7. I have all of my phone numbers in one place.
8. I have stacks of papers, which represent things I have to do.
9. I use self-stick notepapers to remind me of the things I have to do.
10. I carry a calculator, so I can do math faster.
11. I am not afraid to ask people for information that I need.
12. I choose to do my work at times when I'm most alert.
13. I schedule the tasks I don't like to do between the tasks that I like, so that I work faster on the things I don't like to do in order to get to the tasks I enjoy doing.
14. I do two tasks at the same time when one of them requires waiting.
15. I make a budget to manage my money. I know how much money to put in the bank and what bills to pay off immediately after getting paid.
16. I know my environmental preferences and make sure I work under those conditions whenever possible.
17. I get enough sleep and exercise and eat good food. I am in good health.
18. I often review my future goals and obligations.

TOTAL POINTS, PART ONE: _____

Part Two: Do I Throw Time Away?

Give yourself 2 points for each of the following habits you have.

1. I am often sleepy at work. I'm more of a night owl than a morning person.
2. I get to work and get busy. I don't have time to think of my daily obligations or to plan ahead.
3. I like to do just one thing at a time. When the laundry is going, I take a rest.
4. I watch TV at least 3 hours a day.
5. When I have a personal or professional problem, it occupies my mind. I can spend hours worrying about something.
6. I'm not the most organized person in the world. My drawers are a disaster area, and it seems that I spend a lot of time hunting around for things.
7. I don't use a calendar to schedule my time.
8. (If you smoke or drink coffee) I usually spend a good five minutes relaxing with my cigarette or cup of coffee every time I get a chance.
9. I often take personal calls at work.
10. When someone wants to meet with me, I often agree, only to find out later that I am busy at that time. Then I have to call up and reschedule. I just can't keep it all in my head.

TOTAL POINTS, PART TWO: _____

FINAL SCORE:

Part One Points: _____

Part Two Points: _____

(Subtract Part Two from Part One)

Total: _____

What your final score means:

- If you score between 30 and 36, you are excellent at managing your time. Feel free to offer suggestions to others!
- If you score between 22 and 28, you are like most people. Look at the suggestions in Part One to improve your time management skills.
- If you score below 20 you really need to focus on improving your time management skills. You seem to waste a lot of time. Chances are that you are not as organized as you could be. Being disorganized can really work against you on a job and in many other situations.

Baltimore Pipeline Project Job Readiness Program Manual, written by Karen Harvey, Professional Training Systems, Inc. and Sarah Griffen for the Annie E. Casey Foundation, 2005.

40

Time Log

For the next week, keep track of how you spend your time. Mark how much time in minutes and hours that you spent doing the following:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Sleeping							
Eating							
In school							
Working							
Homework							
Commuting							
TV/radio							
Relaxing							
Exercising							
Cleaning							
Visiting							
Partying							
Shopping							
Family							
Nothing							
Other							

Positive changes cause stress

Today, more than ever before, we are bombarded by information about stress and its damaging effects on our lives. Most of what we hear relates to negative situations, such as too much time spent at work, not having enough money, arguing with a loved one, and so on. But stress can also be caused by positive life changes such as:

- ✓ going on vacation
- ✓ getting married

- ✓ traveling abroad
- ✓ having a new family member
- ✓ getting a promotion
- ✓ earning more money
- ✓ buying a new home

Learning to cope with positive life changes that can cause stress is just as important as learning how to deal with negative circumstances.

13-20 Points: High Stress level

Your stress level at work is at the point where your health may be affected, and you should make some immediate changes. Scheduling more time for yourself and the things that you enjoy doing is important. See the section "How to Reduce Stress for a Lifetime" later in this chapter, and start using the techniques suggested.



As a manager, you can help reduce your staff's stress by recognizing what research has shown are the three main causes of employees' stress on the job: not knowing what is expected of them, not getting any feedback on their performance, and not knowing if anyone cares about what they are doing in their job. Taking some basic actions to alleviate these concerns goes a long way in reducing stress for your employees.

①

The Chemistry of Stress

Stress is your body's natural reaction to any demand (physical or psychological) that is put upon it. For example, imagine that you arrive at work a little late one morning and find a note on your desk that reads . . .

Come to my
office right away!

42

written by your boss. How would you feel? What thoughts would start running through your mind? Anxious to find out what she wants, you hurry to her office, but she's out until tomorrow. Now how do you feel? What are you thinking as you drive home that evening?

The next morning you rush up to your boss's office and calmly ask her what she wanted to see you about. Beaming with pride, she says:

I just heard back from our client, and they were delighted with the work you put in on their report. Well done!

When we run this scenario by people in our workshops, they usually start squirming as they visualize the amount of stress their negative thoughts would be producing. The anticipation and worry that the situation generated are all imagined, but the stress is very real and can ruin your whole day, not to mention keep you from getting a good night's rest.

Understanding how your mind works to create chemical stress in your body is an important part of both preventing stress before it occurs and curing stress once you've got it.

The "fight or flight" mechanism

When physical or psychological demands become extreme, your brain alerts the hypothalamus gland (located at the base of your brain) that triggers a complex chain of events known as the *fight or flight* mechanism. This mechanism puts your body on red alert to gather the strength it needs to meet a challenging situation. Some of the ways your body prepares itself to meet a challenge are as follows:

- ✓ The heart pumps faster to get more blood to the muscles.
- ✓ Breathing speeds up to get more oxygen into the blood stream.
- ✓ Muscles tense up in preparation for action.
- ✓ Perspiration increases to reduce body temperature.

Different mammoth — same response

The fight or flight mechanism has been around for thousands of years. Our cave dwelling ancestors had two basic responses when dealing with a hairy mammoth that was looking for a human snack: stay and fight or run like the devil. This fight or flight response prepared the caveperson, within seconds, to have the extra strength needed to carry out either of these options.

The hairy mammoths of yesterday have been replaced by the difficult customers and deadlines of today, yet our hypothalamus gland continues to ignite our body's reactions in the same old way. Unlike our ancestors, however, we don't usually have the option of fighting or running away when confronted with an angry customer (although we're sure you've wanted to do both). The result is that your body gets all revved up with nowhere to go. The chemicals released into your system for extra strength don't get dissipated and can keep you stressed out all day long.

Your hypothalamus isn't paid to think

Recent research has revealed that the hypothalamus gland will trigger the fight or flight response in situations that are viewed as threatening even when, in actuality, they are not. The hypothalamus gland reacts to the signals your brain sends it without distinguishing between what is real and what is imagined. *In other words, your negative thoughts are powerful enough to turn on the stress machinery in your body.*



The last time I was on vacation in Hawaii, I remember lying on the beach looking up at palm trees and hearing, "No, Jack! They can't do that! They have a contract with us! That is unacceptable. We're in this deal to make money — not friends!" Aroused from my sun-drenched stupor, I looked around to see a man, in shorts and sunglasses, pacing up and down the beach yelling into a cellular phone. His head looked as if it was about to explode. He was oblivious to the golden beach, the blue water, and the red Hibiscus flowers that were in full bloom and totally stressed out by his internal irritation. I suddenly realized that if he could create tension in the middle of such calm circumstances, then it stood to reason that he could also create calm in the midst of tense circumstances.

How to Reduce Stress at Work

Literally dozens of techniques are available for reducing stress in the work place. While we can't cover all of them in detail, here are the ones that we use the most:

- ✓ change from stress talk to smart talk
- ✓ don't worry, be concerned
- ✓ manage your time more effectively
- ✓ improve your physical work environment



Change from stress talk to smart talk

How you talk to yourself about your circumstances can either prevent or activate your cave dweller, stress-creating response. For example, imagine that you have just been on the phone with a difficult customer who insisted that he get a refund on a product that he purchased from you six months ago. You sincerely apologize and explain why you can't offer a refund. The customer gets upset, interrupts you, and asks to be transferred to your supervisor. After talking with the customer, your supervisor comes up and tells you that he bent the rules and okayed a refund.

You now have to decide how you are going to talk to yourself about this situation. Are you going to use stress talk or smart talk?

Stress talk

If you put too much of a negative spin on the events, you will create stress talk and end up with your shoulders around your ears. Your stress talk in the above situation might go something like this:

I can't believe it! He always undermines my authority! He just doesn't have the guts to say "no" to difficult customers! He should support whatever decision I make. This always happens to me! I can't win with him! There's no point in talking to him about it because he never listens and it wouldn't make any difference anyway...

Some of the common themes found in stress talk are as follows:

- ✓ **Exaggerating** — Using definitive words like always, never, and won't usually blows things out of proportion and exaggerates the incident. Things you say may feel true but probably aren't:
...He never listens...
- ✓ **Negative labels** — Taking a single action or behavior the person has done and putting a general negative label on it:
...He just doesn't have the guts to say "no" to difficult customers...
- ✓ **Negative outcomes** — Expecting the situation you are in to have a negative outcome and behaving as if the negative outcome is a forgone conclusion:
...There's no point in talking to him...
- ✓ **All or nothing** — Looking at a situation as black or white, all or nothing:
...He should support any decision I make...
- ✓ **Eliminating the positive** — Ignoring all the positive aspects of the situation and focusing exclusively on the negative ones:
...It wouldn't make any difference...

45

Smart talk

Smart talk is constructive self-talk that helps you create less stress, live long, and prosper. Your smart talk in the above situation might go something like this:

I'm really upset, but I know my manager was just trying to keep the customer happy. It must have been an awkward position for him to be in. It would have been difficult for me, too. I know that if I talk to him, we can work out a better way to handle this in the future. Since this doesn't happen all the time, there is no point in getting upset about it.

Some of the common themes found in smart talk are as follows:

- ✓ **Assuming good intentions** — Taking the point of view that whatever action the person took, be it good or bad, he did it with good intentions in mind:
...I know my manager was just trying to keep the customer happy...
- ✓ **Positive outcomes** — Expecting the situation you are in to have a positive outcome and behaving as if the positive outcome is a forgone conclusion:
...We can work out a better way to handle this in the future...
- ✓ **Focusing on the positive** — Seeing the positive aspects of the situation and including those in your self talk:
...This doesn't happen all the time...
- ✓ **Seeing shades of gray** — Being able to look objectively at the situation from both points of view and see how each person is right in his or her own way:
...It must have been an awkward position for him to be in...
- ✓ **Empathize** — Being able to empathize with the circumstances the other person is in, even if you don't agree with the outcome:
...It would have been difficult for me, too...

2

Don't worry, be concerned

The second technique for preventing stress is to learn how to convert worries into concerns. Many people spend a lot of time worrying about things that never happen. Here are some facts about the things people worry about:

- ✓ 40 percent will never happen.
- ✓ 58 percent will turn out better than you think.
- ✓ 2 percent are actually worth worrying about. (Now you can worry about which two percent you should really be worrying about!)

46

A worry is something that you *cannot* do anything about; no action you take can resolve it. For example, suppose you are worried that it will rain on your day off. Obviously you can do nothing to control the weather, so what's the point of worrying? What difference will worry make other than to make you feel tense and upset?

Concerns, on the other hand, are things that you *can* do something about; you can take some action, no matter how small, to help resolve the situation. For example, if you are concerned that you will be late to a meeting, you can call and let the other participants know that you are running a few minutes behind.

If you are worried about something that you can do nothing about, let it go. If you are worried about something that you can do something about, learn to turn the worry into a concern by taking some action.

Manage your time more effectively

Not understanding and utilizing the basic principles of time management can run you ragged. In working with thousands of people, we have found that the time-management tips that have the biggest impact on lowering your stress include:

- ✓ practicing long-term planning
- ✓ using a time-management system

Practicing long-term planning

If you build a house, you don't lay the foundation before you have a blueprint drawn up. You want to be sure that by the time you put the walls up, they all meet in the right place. Your projects at work are the same. A little long-term planning now saves you a lot of grief later. In our workshops, we often ask people to write down their objectives for one month, one year, and five years from now. Invariably, the participants come up with plenty of one month goals but usually have very few one year and even fewer five year goals. For many of us, thinking past today's agenda to tomorrow's vision is difficult, yet most of the things that bring satisfaction and success at work — and in life — require long-term planning.

Most people do not get to the end of their lives and say:

I didn't spend enough time at work!

Be sure that you make time for yourself, family, and friends. Having long term goals for your leisure time is just as important as having them for your career.



Using a time-management system

Busy people always seem to be scurrying from appointment to appointment clutching their time-management books for dear life. If you don't have an organizer, you can find a good selection at your local stationary store. Which-ever type you choose, we recommend that you buy a book with refillable, dated daily pages. Once you have your system, you can get the most out of it by doing the following:

1. Write down all your appointments.

A good way to avoid being late or missing appointments is to write them down. Don't juggle all this information in your head or keep your dates and times on scraps of paper (like old napkins and burrito wrappers), just regularly check your book.

2. Keep a daily To Do list.

At the beginning of each day, or the night before, whichever you prefer, write down the tasks that you plan to do. As you complete each task, check it off. If the task doesn't get done, transfer it to another day when you plan to do it, and so on. As you plan your day, keep in mind that much of your time at work may be taken up with interruptions. If you work an eight-hour day and two hours are taken up with interruptions, you have six hours in which to complete your To Do list. By being honest about how much time you actually have, the interruptions become less upsetting.

3. Prioritize your daily To Do list.

Because some of the items on your daily To Do list will be more important than others, you should prioritize them using a basic A, B, or C prioritizing system. Items that you mark with an A are the most important and critical to get done. Those items you mark with a B are important but not as critical. What's left over are the C items that are routine, mundane, and usually not critical. Be careful not to fall into the trap of spending most of your day doing C activities because they are easy to do.



For the longest time, one of my clients refused to use a time-management system. "I keep everything I need right here," he would say as he tapped his head. As his business grew, he started forgetting appointments and felt overwhelmed by all the things he had to do. Finally, he broke down and bought a time-management system. Months later, returning from a business trip in Europe, his luggage was lost by the airline. He was frantic because his system was in one of the lost suitcases. "My whole life is in that book," he told me, "I can't wait to get it back." When his luggage finally arrived, the first thing he did was rip through it to find that little book. Only after you use a system like this for any length of time do you really come to appreciate how much time and energy it saves you.

Time-management resources

A trip to your local office supply store is a good place to start if you are looking for a time-management system. Some of these systems are not carried in stores and can only be obtained through mail order. While many systems are available, some of the most popular are:

- ✓ The Franklin System (800-644-1776) — mail order and Franklin Quest stores
 - ✓ Time Design (800-637-9942) — mail order only
 - ✓ Day Runner (800-635-5544) — available in most stationery stores
 - ✓ Filofax (800-345-6798) — available in most stationery stores
 - ✓ Day Timer (800-225-5005) — mail order and some stores
- In addition to providing a system, some of these companies offer time management trainings — live and on tape. Call to inquire.



Because so many good ideas are available for gaining control of your time, we strongly recommend that you buy a book, like *Time Management For Dummies* (IDG Books Worldwide, Inc.), or an audio tape that teaches the principles of time management. In addition, several companies offer seminars on time management where a system is provided as part of the course.

Improve your physical work environment

Your surroundings at work can be a contributing factor in your stress level. If you have worked in the same environment for a long time, you're likely to no longer notice the things around you that may be tying knots in your stomach. The three biggest environmental stressors are:

- ✓ noise
- ✓ clutter
- ✓ space

Noise

The next time you are at the airport notice how the airline personnel on the tarmac wear those little colored earplugs. This apparel is not a fashion statement,

4

49

but rather a way of minimizing the noise level that is all around them. Noise pollution is one of the leading causes of stress in the workplace. If you regularly find yourself saying:

I can't hear myself think with all this noise.

then you may want to talk with your supervisor about taking some actions to reduce the noise level.

Clutter

We learned the value of being clutter free in a time management course we took a few years ago. In short, mess is inefficient. It makes it harder to find the things you need when you need them. If you are one of those people who, peeking over a mile-high stack of papers, says:

I have a system — I know where everything is.

you, too, can reduce unnecessary stress by spending a little time sorting and organizing. We recommend setting aside some time to do the following:

✓ Clean out your desk.

Many people use their desk drawers as a storage area for all the items that they don't know what to do with but can't bear to throw out. If you are one of those people, you may find bottles of dried-out correction fluid, refills to pens that you no longer own, and old keys. We recommend you go through your desk drawers and ruthlessly discard anything you haven't used in the last year.

✓ Sort your paperwork.

Sort your paperwork into three piles. The first pile is priority one and includes items that are important and must be handled right away. The priority two pile contains items that are important but can wait. Priority three items should probably just be thrown away.

✓ Organize your files.

The point of having a filing system is to be able to find things quickly and easily. Papers that are misfiled or files that are out of order can be frustrating and time consuming when you are looking for something you need.



The pack rat's credo is:

If I throw it away today, I will need it tomorrow.

This credo is a great excuse never to get rid of anything — which means you end up with everything cluttering up your work space. While there may be those rare occasions when you do throw away something you need later, most of the time what you need you already use.

Space

If you can't swing a cat in your work area, it's either because pets aren't allowed or you are crowded in by furniture, machinery, storage boxes, and so on.

You can do two things to help keep your work space from cramping your style:

✓ Get out more.

Make sure that on your breaks, no matter how short, you go outside or to someplace where you can get a feeling of spaciousness. Doing so periodically during the day helps refresh and renew you.

✓ Reorganize.

Examine how efficiently you are using the physical space you are in. More often than not, no real planning was involved in the arrangement of things in your work area. With a little thought, time, and reorganization, the same stuff can be rearranged to make a more comfortable and spacious work environment.

How to Reduce Stress for a Lifetime

5

In addition to the ideas we outlined for how to reduce stress at work, learning how to prevent and reduce stress for a lifetime is equally important. Following are three ways to incorporate stress reduction into your lifestyle. While your doctor (or more likely your mother) may have been suggesting these for years, recent research confirms that they are still the most effective ways to control stress and stay healthy.

Eat right

Your eating habits have an impact on your stress level. For example, certain foods can dramatically effect your mood:

- ✓ Caffeine (coffee, tea, and cola) stimulates the nervous system and imitates the process of stress arousal. In some people, too much caffeine can result in headaches, irritability, and nervousness.
- ✓ Sugar (cookies, doughnuts, and candy) is a favorite for many people at work because it gives you a quick energy boost. After a short while, though, the *sugar blues* set in and increased tiredness and irritability can result.
- ✓ Salt (chips and fast food) is bad for your blood pressure and stimulates stress arousal.

51

Learning to minimize your intake of the above foods and eating a balanced diet that includes lots of fresh fruit and vegetables, salads, and grains can make an immediate difference to the way you feel throughout your workday. If your eating habits could use a makeover, we recommend that you see your doctor or a nutritionist for guidance.



Most of the foods and drinks above are the kinds of snacks you find in the typical employee lounge vending machine. Do your staff and yourself a favor and start offering some healthy, lower-calorie alternatives.

Exercise regularly

In most cases, some exercise is better than no exercise at all. If you have a job where you spend most of your time sitting on your behind, try incorporating some easy physical activity into your day. You can reduce your stress by walking up stairs instead of using an elevator; going for a fifteen minute walk at lunch time; or parking your car at the far end of the parking lot and walking that extra twenty yards. If you want a more rigorous exercise program to do at home, you need to follow several important guidelines:

Make it something you enjoy

Boredom is the enemy of any exercise program. If you are just starting out, you may want to try a few different types of exercise and see which one you like the best.

Many people we know tell us that they incorporate reading a book, listening to an audio tape, or watching TV while on stationary bikes, stair steppers, and treadmills in order to keep the yawns from setting in.

Make it convenient

One well-intentioned friend of ours joined a state-of-the-art gym, but she hardly ever goes there because it's twenty minutes away from her home. When she joined, she didn't think the distance would be a problem, but now just the thought of making this drive stops her on most days. Any exercise expert will tell you that the more convenient it is for you to exercise, the more likely you are to do it.

Schedule it

This is one place where you can use your handy time management system to support you in your personal life. Many people find that if they make an appointment with themselves to exercise and schedule it in their book, they are more likely to carry through with it.

See your doctor before you start

Be careful not to overdo it because doing so increases your risk of injury and only prevents you from continuing. Before you begin any exercise program, see your doctor. Taking your exercise routine at a pace that you are comfortable with is essential for long-term success.



If you own a company, consider setting up free or discount health club memberships for your staff at a location near your office. They will be healthier and happier employees as a result. The benefit to you is increased productivity and reduced absenteeism.

Practice relaxation techniques

Basic relaxation techniques (including meditation) have been practiced for thousands of years as a way to reduce tension, fatigue, and stress in the body and mind. The results of using these techniques can include:

- ✓ lowering of heart rate, blood pressure, and respiration rate
- ✓ increase of alpha waves, the brain waves associated with deep relaxation
- ✓ rapid decline of blood chemicals associated with anxiety

Following are two techniques that you can use at home or during your lunch break at work to reduce stress.

Tense and release

Sit in a comfortable chair and take a few deep breaths. With your arms bent at the elbow, tightly squeeze your hands into fists and then curl them up toward your shoulders so that your hand, arm, and shoulder muscles are tensed. Remember to keep breathing and hold this position for 5 seconds. Slowly release the tension and notice how it feels.

Next straighten out your legs and point your toes straight out in front of you so that your calf and thigh muscles are tensed. Hold this for 5 seconds and slowly release. Notice how your legs feel as the tension is released.

Continue the exercise by tensing the muscles in your neck, chest, shoulders, and back. When you finish, your body should feel more relaxed and at ease.

Gold liquid

Sit in a comfortable position with your eyes closed. Imagine that your body is a glass container full of gold liquid and that all the gold liquid is slowly draining

53

out from your fingertips and toes. As the liquid drains out and the level goes down, imagine that it takes with it all the tensions, worries, and negative thoughts of the moment. Once you are drained out, go back over your glass vessel and see if you find any remaining traces of gold liquid. If you do, go back to that part of your body and clean the liquid out.

As a final step, take a few minutes to become aware of your breathing. Focus your attention on your breath as it goes in and out. Breathe deeply and naturally. As thoughts come to mind, just notice them and then go back to your breathing. Do this exercise for a few minutes until you feel relaxed (or have fallen asleep). When you are ready to finish, briefly imagine your immediate surroundings and then slowly open your eyes, feeling refreshed and relaxed. For a quick pick-me-up, do this exercise at work during a ten minute break. For a deeper relaxation at home, do the same exercise for 20 to 30 minutes.



Because both of these techniques can be done while you are sitting down, they work very well for reducing fatigue and stress on long airplane flights.



Part 1: The chemistry of stress

Read just your section of the text and write down:

3 of the most important points

2 interesting ideas

1 question you still have

SS

Feedback Preparation Sheet

One strength that you have shown is _____; and I noticed this when you _____, and _____.

When giving feedback:

- Be aware of timing.
- Be specific.
- Be caring.
- Be selective.
- Be balanced.
- Be honest.

When receiving feedback:

- Be receptive, not defensive.
- Listen.
- Remember.
- Use your judgment.
- Use it.

Name	Strengths	Growth Areas
	<p>STRENGTH: _____</p> <p>SPECIFIC EXAMPLE(S):</p> <p>•</p> <p>•</p> <p>•</p>	<p>GROWTH: _____</p> <p>SPECIFIC EXAMPLE(S):</p> <p>•</p> <p>•</p> <p>•</p>
	<p>STRENGTH: _____</p> <p>SPECIFIC EXAMPLE(S):</p> <p>•</p> <p>•</p> <p>•</p>	<p>GROWTH: _____</p> <p>SPECIFIC EXAMPLE(S):</p> <p>•</p> <p>•</p> <p>•</p>

Some Sample Interview Questions

Introductory Questions:

1. Tell me about yourself.
2. Tell me what you know about the position you are applying for.
3. What is your 3 yr/5 yr plan? (Where do you see yourself in 3-5 years?)
4. Why are you interested in this kind of work right now in your life?
5. Why do you want to work here at _____?
6. Tell me what you know about _____ (this place or business).
7. Why should we hire you?
8. Why do you think you would be good for this job?

Questions About your Experience and professional skills

9. What relevant experience do you have?
10. Tell me about your current position or most recent past work.
11. Tell me about your last job. Why did you leave that job?
12. What did you like most about your last job?
13. What didn't you like about your last job?
14. What are some of your relevant skills?
15. Tell me about the training, education, and work experiences that you believe have prepared you for this position.
16. What aspects of the job do you think will be challenging for you?

Questions about your personality and your work habits/ethic

17. What are your strengths?
18. What are your weaknesses?
19. Give me an example of something you have done on the job that you are proud of.
20. When was the last time you were late to work, school or an appointment? How did you handle it?
21. Describe your relationship with a current or past supervisor. What would your supervisor say about you?
22. Tell me about a time when you and your supervisor had difficulties seeing each other's point of view. How did you handle it? What was the outcome?
23. Discuss a time when you had a misunderstanding with a co-worker, how you handled it, and what the outcome was.
24. Give me an example of how you work on a team.
25. What do you like best about working with other people? What do you like least?
26. What do you do to cope with stress in your life?
27. What would you do if your shift ended at 4:30 and you finished everything at 4:00?
28. What would you do if your supervisor asked you to do something that wasn't your job?

Decision making/working under pressure

29. Describe a time when your supervisor asked you to change the way you had been doing something. How did you handle it? What was the outcome?
30. Describe a situation when you worked closely with others to get a difficult job done.

Some Sample Interview Questions

31. Describe a situation when you had to make an immediate decision on an issue, and your supervisor was not available for input. Why did you make that decision? What were your time constraints? How did it turn out?
32. How do you work under pressure? Describe a time when you had a lot to get done in a very short amount of time in order to meet a tough deadline.
33. What do you do if you have too many things to accomplish in one day?
34. Tell me about a time when it was critical that you paid close attention to detail.
35. Give me an example of a time when you were able to work well under pressure/in a fast-paced environment.

Customer Service

36. What does good customer service look like?
37. What do you consider most important when working with customers?
38. Tell me about a time when you received excellent customer service. Why did you consider the service excellent?
39. Tell me about a time when someone at work told you that you provided excellent customer service.
40. How would you handle a difficult or rude customer?
41. Describe a time when you had to deal with a customer who was very upset. How did you handle it? What was the outcome?

Other questions

42. Can you explain the gap in your resume?
43. What is your availability? Are you willing to work overtime? Weekends?
44. Do you have any questions for me?

58

Skills Identification

Communication Skills

- ☐ Reading and following directions
- ☐ Putting things in alphabetical order
- ☐ Comparing or cross-checking two lists
- ☐ Filling out forms
- ☐ Writing letters and memos correctly
- ☐ Reading and understanding policies and memos
- ☐ Writing reports
- ☐ Speaking to people you don't know
- ☐ Speaking English *and* another language
- ☐ Taking notes while someone speaks
- ☐ Finding information (getting what you need to know out of the phonebook, a dictionary, the library, etc.)
- ☐ Using a map
- ☐ Reading bus, train, and plane schedules
- ☐ Explaining things to other people
- ☐ Knowing when to ask for help or more explanation

Number Skills

- ☐ Doing arithmetic correctly
- ☐ Using percentages and decimals
- ☐ Using a calculator
- ☐ Rounding off numbers
- ☐ Typing/keyboarding
- ☐ Calculating hours worked, money owed, etc.
- ☐ Estimating costs and/or time needed to complete a job
- ☐ Using a database program on a computer

Technical Skills

- ☐ Making, fixing, and repairing things
- ☐ Operating machinery
- ☐ Installing things
- ☐ Building things
- ☐ Gardening, landscaping, and farming

Business Skills

- ☐ Operating a computer
- ☐ Using a business telephone
- ☐ Filing, sorting, and classifying information
- ☐ Balancing checkbooks
- ☐ Working with budgets
- ☐ Setting up and closing out a cash register

Management and Self-Management Skills

- ☐ Being patient with others
- ☐ Keeping a cheerful attitude
- ☐ Getting interested/excited about the task at hand
- ☐ Offering to help when it's needed
- ☐ Knowing how to take direction
- ☐ Motivating yourself to do what needs to get done
- ☐ Helping motivate others to get the job done
- ☐ Prioritizing tasks so that the larger goal is met on time
- ☐ Following the rules
- ☐ Presenting a neat and professional image
- ☐ Checking your own work
- ☐ Working hard without complaining
- ☐ Using courtesy when dealing with others
- ☐ Seeking help when needed
- ☐ Being eager to learn
- ☐ Speaking up for yourself
- ☐ Solving problems in a cooperative way

Creative/Artistic

- ☐ Artistic
- ☐ Drawing
- ☐ Expressing
- ☐ Performing
- ☐ Presenting artistic ideas
- ☐ Dancing, body movement
- ☐ Visualizing shapes
- ☐ Designing
- ☐ Model making
- ☐ Making handicrafts
- ☐ Writing poetry
- ☐ Illustrating, sketching
- ☐ Doing photography
- ☐ Mechanical drawing

People Skills

- ☐ Caring for children responsibly
- ☐ Caring for the sick and elderly
- ☐ Showing warmth and caring
- ☐ Calming people down
- ☐ Helping people complete a task
- ☐ Teaching someone how to do something
- ☐ Knowing how to get along with different people/personalities
- ☐ Leading groups or activities

Use this guide to help you write your personal statement. Complete each statement and answer the questions. Then use your responses to write a your personal introductory statement.

My name is _____, and I am from _____

When I was growing up, I learned . . .

Some of my strengths are . . .

- _____
- _____
- _____

When I find something difficult, I . . .

When I worked as a _____, I learned that . . .

When I am not working, I enjoy . . .

- _____
- _____

Some goals I have for myself are . . .

- _____
- _____

Presenting a Positive Image

SOURCE: Leon County Schools Adult & Community Education, Career Education Guide

- Keep your shoulders back.
- Keep your head erect.
- Avoid folding your arms across your chest.
- Avoid sitting or standing with arms or legs far apart or in what could be described as an “open” position.
- Use gestures that enhance your verbal message.
- Nod your head affirmatively at appropriate times—but do not overdo it.
- Project your voice loudly enough to be heard by the interviewer.
- Articulate clearly—do not mumble.
- Use pauses for emphasis.
- Watch your pace—avoid talking too fast or too slow. Many people talk fast when they are nervous.
- Know yourself and try to regulate your pace accordingly.

From ABE Florida 2001: Workforce Readiness Learning Activities Resource Guide, Leon County Schools Adult and Community Education.

Assertive Body Language Exercise

P = PASSIVE

AS = ASSERTIVE

AG = AGGRESSIVE

- _____ 1. Fists on hips
- _____ 2. Touching someone's forearm as you speak with them
- _____ 3. Shifting repeatedly from one foot to another while standing
- _____ 4. Constantly nodding head up and down while someone is speaking to you
- _____ 5. Leaning back, propping feet on desk, grasping hands behind head
- _____ 6. Looking down while speaking
- _____ 7. Standing with arms folded while listening
- _____ 8. Standing with arms folded, head tilted, and legs crossed while listening
- _____ 9. Sitting with elbows on table, hands together, chin on hands while listening
- _____ 10. Elbows on table, hands together at fingertips forming a "steeple"
- _____ 11. Voice rising at the end of a sentence or statement
- _____ 12. Unblinking glare or stare; tense look
- _____ 13. Slumped shoulders
- _____ 14. Occasional head nodding
- _____ 15. Curt delivery when speaking

Baltimore Pipeline Project Job Readiness Program Manual, written by Karen Harvey, Professional Training Systems, Inc. and Sarah Griffen for the Annie E. Casey Foundation, 2005.



Tips For Being Assertive

1. Eye Contact

Avoid harsh stares. Do not stare at people 100 percent of the time.

2. Body Posture

Try to face the person. Stand or sit up tall, but don't be stiff as a board.

3. Distance/Physical Contact

You should not be close enough to be in the person's face. Keep a comfortable distance

4. Gesture

Use hand gestures to add to what you are saying, but don't overdo it!

5. Facial Expressions

Your face should match your emotion and what you are saying. Don't laugh when you are upset, and don't frown when you are happy. A relaxed, pleasant face is best when you are happy, a serious face when you are upset.

6. Voice Tone, Inflection, Volume

When you are making an assertive message, you want to be heard. Pay attention to the tone and inflection of your voice and the volume. Use a volume that is appropriate for inside, face to-face conversation.

7. Fluency

It is important to get your words out in an efficient manner. If a person stammers or rambles on, the listener will become bored.

8. Timing

When you are expressing negative feelings or making a request of someone, this is especially important. Seven days later may be too late. Doing it when you are most upset is not the right time either.

9. Listening

An important part of assertiveness. Give the other person a chance to respond.

10. Content

What a person says is one of the most important aspects of the assertive message.

Baltimore Pipeline Project Job Readiness Program Manual, written by Karen Harvey, Professional Training Systems, Inc. and Sarah Griffen for the Annie E. Casey Foundation, 2005.

64

Things You Have to Explain to People Who've Never Worked in Kitchens

By Dan GentilePublished on 6/22/2014 at 8:00 PM

A healthy restaurant ecosystem has many components: a charming front-of-house team, cunning managers, and a motley crew of underpaid misfits that are actually cooking your food.

Unless you've worked in a kitchen, it's hard to understand the chaotic dance of a dinner rush. Coded language, constant personality clashes, and thick-as-blood camaraderie are side dishes to every entree you've ever ordered.

To turn the world of cooks into an open kitchen, we asked back-of-house staff from around the country to enlighten us on some of the things that they're always having to explain to their friends who they only get to hang out with on Monday nights.

Salt and butter are everywhere

But always unsalted butter. Also, half-sticks of butter look downright cutesy compared to 1lb blocks.

Cooks don't get tipped out

If you're going by the book, it's illegal to force employees to pool tips for back-of-house workers. Therefore the kitchen is always making way less money than the servers.

"No, I can't just take Saturday night off..."

Not Friday either. But are you free on Monday?

Kitchens are both mentally and physically draining

Most jobs are either physically draining or mentally draining, not both.

Dead, in jail, or in the hospital...

No other excuses. You're expected to perform flawlessly at all other times, even if you're sick, hungover, grieving, or heartbroken because you found the person you love screwing someone else because you're "never around."

Cooking is like sex

Sometimes you need things to be hot, hard, and fast. Sometimes you need it gentle, slow, and easy.

You get really gnarly scars

Also, say goodbye to the feeling in your fingers.

65

You must over-communicate

It's crucial to say things like "corner, behind, sharp beside, hot."

If your friends say you should open a restaurant, you really shouldn't

Being a good cook at home with friends and family is absolutely nothing like cooking in a restaurant kitchen.

You stand for 10 hours with no breaks

That's not to mention dead-lifting a 50lb box of frozen chicken while stooped over in the freezer while your non-slips are freezing to the ground and you are rushing to put away the order because you are now down a guy because he took two fingers off in the Robot Coupe and your kitchen manager had to go with him to a hospital because he doesn't speak English and may be in the country illegally.

A little kindness goes a long way

Unless they're wearing a chef's coat, people in kitchens are generally treated like they don't exist. Treat them like human beings, and you'll likely be rewarded.

If you have time to lean, you got time to clean

This is manager-speak for "There are innumerable things to do constantly in a professional kitchen. Rarely is there time to chill."

You answer someone with a clear "yes" or "no"

Anything else is too ambiguous.

Urgency and precision are paramount

It's OK if Bob in finance doesn't have that report ready yet. It does matter if Mikey on fish doesn't have that sole cooked at the right time and for the right amount of time, because if it's there a minute too long, the 50 other items and dishes stacked behind it begin to slip into oblivion.

Your day off isn't for hobbies

It's for doing laundry. Really, really smelly laundry.

Just because you're around food all day doesn't mean you're eating it

Most cooks eat like 3-year-olds. You're tasting a dozen things at all stages of cooking, sweet after savory. It makes you not want to eat, and when you do it's generally hunched over a trash can.

It's harder to cook in small portions

66

After you're used to cooking for hundreds of people a night, making one cup of rice seems impossible.

Even in scratch kitchens, 98% of everything is prepared ahead of time

Kitchens spend all day prepping for dinner, so while a special order might not seem like too much trouble, it puts a wrench in six hours of prep and the next six hours of muscle memory.

Specials aren't necessarily just things the restaurant can't sell

Surplus goes into the family meal. More often this is to test out new menu items.

Menus are based on kitchen limitations

There's only so much space on the grill. A grilled salad might sound like a great idea, but odds are a small kitchen needs those grills for steaks.

Don't ask, "Why don't you work somewhere that pays better?"

Odds are cooks didn't choose their careers based on finances.

Most floors are slightly pitched for drainage purposes

So without thinking about it, you're balancing yourself constantly. That's why your legs feel like you've run a marathon when you get home and your calves have wicked definition.

Lead, follow, or get the hell out of the way

If you can't keep up, you had better find some sort of use for yourself to avoid becoming a weak link.

Kitchen teams include felons, perverts, and addicts

And they're all pretty okay as long as they don't screw you over or steal money.

There's no such thing as personal space

Just "the dance."

No matter how hot it is, don't drop it

Refer to the note about losing feeling in your fingers.

Everything is very specifically labeled

Always.

Don't show up 10 minutes to close and course out your meal

The kitchen is already cleaning up.

When your rec-league softball team decides to come for lunch...

For God's sake, call ahead.

It gets really hot

Consider how hot it gets in your kitchen. Multiply that by eight hours and hundreds of plates.

You're not paying \$18 for a pork chop

The cost of that entree also pays for the electricity, bussers, napkin-cleaning service, dish washers, cooks, and waiters. You're not paying so much for the food, but rather for the fact that you don't have to clean up after your damn self.

Dating someone who works in a kitchen is tough

The hours are long and hard and irregular and late. And once you get off at midnight, you're both equally exhausted and amped up, a problem generally solved by silent beer drinking.

There are two ways to break tension

Either by snapping at someone or making a joke. Each have different applications, but both are equally important.

Adding Fractions with the Same Denominators

The answer to an addition problem is called the **sum** or **total**. You know that the sum of a quarter and another quarter is two quarters, or $\frac{1}{2}$ dollar.

To add fractions with the same denominators, add the numerators, and put the total over the denominator.

EXAMPLE $\frac{2}{7} + \frac{3}{7} =$

STEP 1 Add the numerators. $2 + 3 = 5$

STEP 2 Put the total, 5, over the denominator 7.

$$\begin{array}{r} \frac{2}{7} \\ + \frac{3}{7} \\ \hline \frac{5}{7} \end{array}$$

Add.

$$\begin{array}{r} 1. \quad \frac{2}{9} \\ + \frac{3}{9} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{3}{7} \\ + \frac{1}{7} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{4}{8} \\ + \frac{3}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{5}{12} \\ + \frac{2}{12} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{4}{13} \\ + \frac{6}{13} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \frac{3}{11} \\ \frac{1}{11} \\ + \frac{2}{11} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{5}{9} \\ \frac{2}{9} \\ + \frac{1}{9} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{2}{15} \\ \frac{7}{15} \\ + \frac{4}{15} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{8}{17} \\ \frac{2}{17} \\ + \frac{5}{17} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{2}{19} \\ \frac{9}{19} \\ + \frac{5}{19} \\ \hline \end{array}$$

With mixed numbers, add fractions and whole numbers separately.

$$\begin{array}{r} 3. \quad 4\frac{2}{5} \\ + 3\frac{1}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 6\frac{3}{10} \\ + 8\frac{6}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 5\frac{4}{11} \\ + 4\frac{5}{11} \\ \hline \end{array}$$

$$\begin{array}{r} 8\frac{7}{13} \\ + 6\frac{4}{13} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 3\frac{2}{9} \\ 5\frac{1}{9} \\ + 4\frac{5}{9} \\ \hline \end{array}$$

$$\begin{array}{r} 6\frac{4}{11} \\ 9\frac{2}{11} \\ + 2\frac{3}{11} \\ \hline \end{array}$$

$$\begin{array}{r} 7\frac{2}{7} \\ 8\frac{2}{7} \\ + 5\frac{2}{7} \\ \hline \end{array}$$

$$\begin{array}{r} 9\frac{3}{10} \\ 2\frac{5}{10} \\ + 4\frac{1}{10} \\ \hline \end{array}$$

69

Adding Fractions with Different Denominators

When the fractions in an addition problem do not have the same denominators, rewrite the problem so that each fraction has the same denominator, called a **common denominator**.

To add a half dollar and a quarter, think of the half dollar as two quarters. As a fraction problem, a half dollar plus a quarter is $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$ dollar.

A common denominator is a number that can be divided evenly by all the denominators in a problem. The *smallest* number that can be divided evenly by all the denominators in a problem is called the **lowest common denominator** or **LCD**.

Sometimes the largest denominator in a problem is the LCD.

EXAMPLE $\frac{3}{5} + \frac{4}{15} =$

STEP 1 Since 5 divides evenly into 15, the LCD is 15.

STEP 2 Raise $\frac{3}{5}$ to $\frac{9}{15}$. (See page 18.)

STEP 3 Add the new fractions.

$$\begin{array}{r} \frac{3}{5} = \frac{9}{15} \\ + \frac{4}{15} = \frac{4}{15} \\ \hline \frac{13}{15} \end{array}$$

Add and reduce.

1. $\frac{3}{4} + \frac{1}{2}$

$\frac{2}{3} + \frac{5}{6}$

$\frac{7}{8} + \frac{3}{4}$

$\frac{5}{6} + \frac{1}{3}$

$\frac{5}{9} + \frac{2}{3}$

2. $\frac{3}{8} + \frac{3}{4} + \frac{1}{2}$

$\frac{1}{6} + \frac{5}{12} + \frac{3}{4}$

$\frac{2}{5} + \frac{1}{2} + \frac{9}{10}$

$\frac{2}{3} + \frac{5}{12} + \frac{1}{4}$

$\frac{3}{5} + \frac{1}{3} + \frac{4}{15}$

3. $\frac{3}{4} + \frac{1}{2} + \frac{3}{20}$

$\frac{2}{3} + \frac{5}{6} + \frac{1}{2}$

$\frac{5}{24} + \frac{3}{8} + \frac{1}{3}$

$\frac{4}{9} + \frac{5}{6} + \frac{7}{18}$

$\frac{7}{10} + \frac{1}{3} + \frac{11}{30}$

Finding a Common Denominator

Here are two ways of finding a common denominator when the largest denominator in an addition problem doesn't work.

1. Multiply the denominators together.
2. Go through the multiplication table of the largest denominator.

EXAMPLE 1 $\frac{2}{5} + \frac{3}{4} =$

STEP 1 Multiply the denominators. $5 \times 4 = 20$. 20 is the LCD.

STEP 2 Raise each fraction to 20ths as on page 18.

STEP 3 Add the new fractions.

STEP 4 Change the answer to a mixed number.

$$\begin{array}{r} \frac{2}{5} = \frac{8}{20} \\ + \frac{3}{4} = \frac{15}{20} \\ \hline \frac{23}{20} = 1\frac{3}{20} \end{array}$$

EXAMPLE 2 $\frac{2}{3} + \frac{5}{6} + \frac{3}{4} =$

STEP 1 Go through the multiplication table of the 6's.
 $6 \times 1 = 6$, which cannot be divided by 4.
 $6 \times 2 = 12$, which can be divided by 3 and 4.

STEP 2 Raise each fraction to 12ths.

STEP 3 Add the new fractions.

STEP 4 Change the answer to a mixed number and reduce.

$$\begin{array}{r} \frac{2}{3} = \frac{8}{12} \\ \frac{5}{6} = \frac{10}{12} \\ + \frac{3}{4} = \frac{9}{12} \\ \hline \frac{27}{12} = 2\frac{3}{12} = 2\frac{1}{4} \end{array}$$

1. $\frac{3}{5}$
 $+$ $\frac{2}{3}$
 \hline

$\frac{3}{4}$
 $+$ $\frac{1}{3}$
 \hline

$\frac{2}{5}$
 $+$ $\frac{1}{2}$
 \hline

$\frac{3}{7}$
 $+$ $\frac{1}{3}$
 \hline

$\frac{5}{6}$
 $+$ $\frac{2}{5}$
 \hline

2. $\frac{4}{7}$
 $+$ $\frac{3}{4}$
 \hline

$\frac{5}{6}$
 $+$ $\frac{2}{7}$
 \hline

$\frac{3}{8}$
 $+$ $\frac{4}{5}$
 \hline

$\frac{2}{3}$
 $+$ $\frac{4}{11}$
 \hline

$\frac{5}{9}$
 $+$ $\frac{3}{5}$
 \hline

71

Multiplying Fractions and Whole Numbers

Any whole number can be written as a fraction with a denominator of 1. For example, 5 is the same as $\frac{5}{1}$. To check, divide 5 by 1.

EXAMPLE $9 \times \frac{5}{6} =$

STEP 1 Write 9 as a fraction. $9 = \frac{9}{1}$

$$\frac{\overset{3}{\cancel{9}}}{1} \times \frac{5}{\underset{2}{\cancel{6}}} = \frac{15}{2} = 7\frac{1}{2}$$

STEP 2 Cancel 9 and 6 by 3.

STEP 3 Multiply across by the new numbers.

STEP 4 Change the improper fraction to a mixed number (see page 19).

Multiply and reduce.

1. $4 \times \frac{3}{7} =$

$9 \times \frac{1}{4} =$

$\frac{2}{3} \times 10 =$

$3 \times \frac{4}{5} =$

2. $15 \times \frac{2}{3} =$

$\frac{5}{9} \times 18 =$

$\frac{4}{21} \times 7 =$

$\frac{8}{15} \times 45 =$

3. $\frac{7}{8} \times 24 =$

$\frac{11}{40} \times 20 =$

$32 \times \frac{7}{16} =$

$12 \times \frac{15}{16} =$

4. $35 \times \frac{7}{30} =$

$16 \times \frac{5}{24} =$

$\frac{7}{12} \times 36 =$

$2 \times \frac{9}{10} =$

Multiplying Mixed Numbers

To multiply with mixed numbers, change every mixed number to an improper fraction. (See page 21.)

EXAMPLE $4\frac{1}{2} \times \frac{5}{6} =$

STEP 1 Change $4\frac{1}{2}$ to an improper fraction.

$$4\frac{1}{2} = \frac{9}{2}$$

STEP 2 Cancel 9 and 6 by 3.

STEP 3 Multiply across.

STEP 4 Change the improper fraction to a mixed number (see page 19).

$$\frac{\cancel{9}^3}{2} \times \frac{5}{\cancel{6}_2} = \frac{15}{4} = 3\frac{3}{4}$$

Multiply and reduce.

1. $1\frac{1}{2} \times \frac{1}{4} =$

$1\frac{2}{3} \times \frac{2}{7} =$

$2\frac{1}{4} \times \frac{7}{8} =$

$\frac{3}{10} \times 5\frac{1}{2} =$

2. $\frac{4}{9} \times 3\frac{3}{4} =$

$\frac{2}{7} \times 2\frac{5}{8} =$

$4\frac{2}{3} \times \frac{15}{16} =$

$6\frac{3}{7} \times \frac{4}{5} =$

3. $2\frac{1}{3} \times 1\frac{1}{5} =$

$6\frac{2}{3} \times 3\frac{3}{4} =$

$3\frac{5}{7} \times 4\frac{3}{8} =$

$16\frac{1}{3} \times 2\frac{5}{14} =$

4. $3\frac{3}{4} \times \frac{8}{9} \times 1\frac{1}{5} =$

$2\frac{2}{5} \times 3\frac{3}{8} \times 2\frac{7}{9} =$

$2\frac{2}{15} \times 5\frac{1}{4} \times 7\frac{1}{2} =$

73

Divide and reduce.

1. $12 \div \frac{2}{5} =$

$9 \div \frac{1}{3} =$

$5 \div \frac{3}{4} =$

$6 \div \frac{2}{3} =$

2. $8 \div \frac{3}{8} =$

$25 \div \frac{5}{6} =$

$17 \div \frac{1}{2} =$

$32 \div \frac{8}{9} =$

3. $45 \div \frac{9}{10} =$

$49 \div \frac{7}{12} =$

$36 \div \frac{24}{25} =$

$54 \div \frac{9}{11} =$

4. $48 \div \frac{8}{15} =$

$27 \div \frac{3}{4} =$

$16 \div \frac{3}{5} =$

$30 \div \frac{20}{21} =$

5. $32 \div \frac{4}{21} =$

$45 \div \frac{18}{19} =$

$15 \div \frac{10}{11} =$

$12 \div \frac{9}{10} =$

6. $20 \div \frac{5}{8} =$

$5 \div \frac{15}{16} =$

$7 \div \frac{21}{25} =$

$56 \div \frac{24}{25} =$

Applying Your Division Skills

Word problems with division of fractions are tricky because you need to invert the correct number. Remember that the amount being *divided*, *cut*, or *shared* must be written to the *left* of the \div sign. For example, if $5\frac{1}{2}$ pounds of peanuts are to be divided equally among three people, write $5\frac{1}{2}$ first. The problem becomes $5\frac{1}{2} \div 3$. The number on the *right* gets inverted.

Solve and write the correct label, such as pounds or inches, next to each answer. Reduce each answer to lowest terms. Read each problem carefully. Some problems require operations other than division.

1. How many pieces of wood each $7\frac{1}{2}$ inches long can be cut from a board that is 45 inches long?
2. Sandy baked $4\frac{1}{2}$ pounds of cookies. She divided the cookies equally among two friends and herself. How many pounds of cookies did each person get?
3. A tailor needs $3\frac{2}{3}$ yards of material to make a suit. How many suits can she make from 22 yards of material?
4. How many $1\frac{1}{2}$ -pound loaves of bread can be made from 9 pounds of dough?
5. How many $\frac{3}{4}$ -pound cans of tomatoes can be filled with 24 pounds of tomatoes?
6. To make picture frames, Carlos plans to cut a piece of wooden molding 75 inches long into small strips each $8\frac{1}{3}$ inches long. Assuming there is no waste, how many strips can he cut from the long piece?
7. Sarah needs $2\frac{1}{4}$ yards of material to make a dress for her daughter. How many dresses can she make from $10\frac{1}{2}$ yards of material?
8. On a quiz Adriano got $\frac{7}{8}$ of the problems correct. He had 21 problems correct. How many problems were on the test?

75

9. Jenny has paid $\frac{1}{4}$ of her car loan. So far she has paid \$900. What was the total amount of the loan?
 10. In the last problem, how much does Jenny still owe on her car loan?
 11. On a snowy evening only $\frac{2}{3}$ of the registered students in Bob's chess class came to school. Eighteen students attended that night. How many students are registered in Bob's class?
 12. In the last problem, how many of the registered students were absent on the snowy evening?
 13. Workers in a factory were asked if they thought safety conditions were adequate. Ninety of the workers answered that they thought conditions were satisfactory. They represent $\frac{3}{5}$ of all the workers who were questioned. How many workers were questioned?
 14. In the last problem, how many of the workers did not think that safety conditions were adequate?
 15. On the first day of the fishing season, Jed caught $10\frac{1}{2}$ pounds of trout. He decided to keep half of the amount for himself. How many pounds of trout did he keep?
 16. In the last problem, Jed gave the remaining trout to three friends. If they each got the same weight, how much trout did each receive?
 17. The budget of $\$1\frac{1}{2}$ million to renovate a school gym will be shared equally between the state and the local community. How much does the local community have to pay for the renovation?
-
18. In the last problem, the school expects to get $\frac{1}{3}$ of the amount that the community owes for the gym renovation from donations. The rest will come from taxes. How much will the community have to raise in taxes?

Measurements Used in the Professional Kitchen

When measuring ingredients in the kitchen, you measure by **weight** (gravitational pull) or by **volume** (a defined amount of space). The focuses of this chapter are (1) the formal standards by which ingredients are measured in the professional kitchen and (2) converting quantities from one unit of measure to another.

There are two commonly used systems of measurement: the **U.S. customary system** and the **metric system**. The metric system, which is formally known as the **Système International d'Unités (SI)**, is the most prevalent standard across the globe. Both SI and U.S. customary unit standards will be discussed in this text. Care has been taken to pare down the amount of information to manageable quantities for the emergent professional. Over time you will expand your knowledge base past the contents of this resource.

MEASURING BY WEIGHT

Standard weight measurements are defined legally. Weight measures based on the U.S. customary 16-ounce pound are called **avoirdupois** measures. The metric gram has been defined as being the weight of 1 cubic centimeter of water, and the kilogram is defined as the weight of 1000 cubic centimeters, or 1 liter, of space filled with water.

MEASURES OF WEIGHT	WEIGHT MEASURE	ABBREVIATION
METRIC SYSTEM	gram	g
	kilogram	kg
U.S. CUSTOMARY SYSTEM	pound	# or lb
	ounce	oz

Written in order from the smallest to the largest unit of weight:

gram

ounce

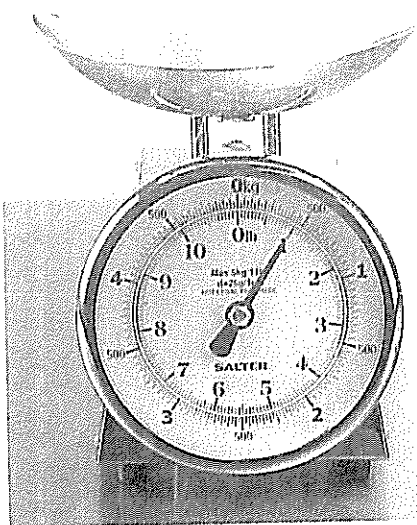
pound

kilogram

The standard weight **equivalents**, or relationships between the weight measures, are shown below. These relationships are constant.

28.35 g	=	1 oz		
453.6 g	=	16 oz	=	1 # = 0.4536 kg
1000 g	=	35.27 oz	=	2.205 # = 1 kg

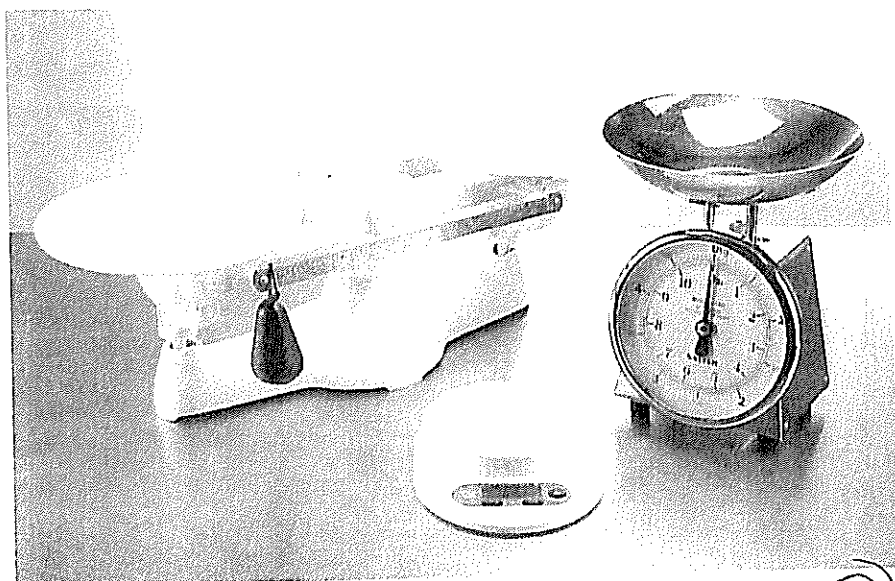
Equivalent weights. Left: Butter weighed in pounds on a spring scale. Right: The same butter weighed in grams on a digital scale.



Each row in the chart contains equivalent quantities. For instance, the second row tells us that if 453.6 grams of a substance is placed on a digital scale, the scale could read 16 ounces, 1 pound, or 0.4536 kilograms. The quantity on the scale did not change, but the weight was expressed using different units of measure. Similarly, if 1000 grams of a substance was placed on a digital scale, the scale could read 35.27 ounces, 2.205 pounds, or 1 kilogram. You can also use **mixed measurements** (measurements using more than one unit) to specify a quantity. For example, 21 ounces could be written as 1 pound 5 ounces.

To measure weight you can use a traditional spring scale, a digital scale, or a balance scale.

For professional kitchen use, a digital scale accurate to within 1 gram or $\frac{1}{100}$ of an ounce is adequate for just about any need. Many kitchens use scales weighing in intervals of 5 grams or $\frac{1}{8}$ ounce, which are less accurate but also less expensive. Your choice of scale depends upon the needs of your particular kitchen.



Types of scales. Left to right: balance scale, digital scale, spring scale.

MEASURING BY VOLUME

Measuring an ingredient by volume means that you are filling a certain quantity of space with an ingredient. Volume measures are legally defined in the U.S. customary system, and there are liquid volume and dry volume measures. The liquid and dry volume measures are two separate sets of volume measurements, and corresponding units are different sizes. The volume units used in the professional kitchen are based on the liquid volume scale with the exception of the peck and bushel, which are U.S. customary dry volume measures. (For more information about liquid and dry volume measurements, see Appendix I.)

The milliliter is defined as 1 cubic centimeter of space, or the amount of space that 1 gram of water occupies. The liter is defined as 1000 cubic centimeters of space or 1000 milliliters of volume. This can also be looked at as the amount of space that 1 kilogram of water occupies.

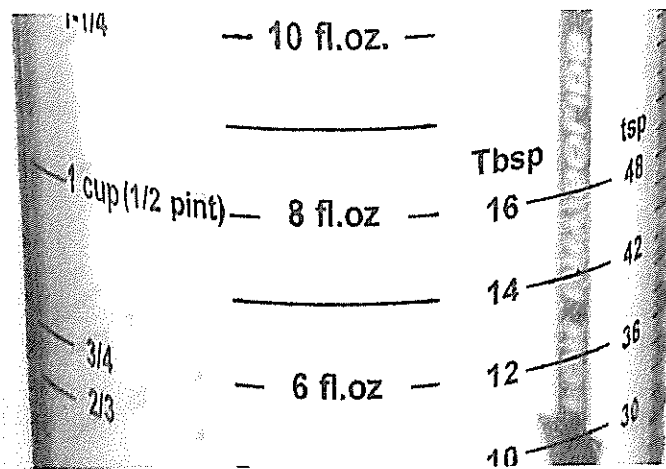
MEASURES OF VOLUME	VOLUME MEASURE	ABBREVIATION
METRIC SYSTEM	milliliter	mL or ml
	liter	L
U.S. CUSTOMARY SYSTEM	teaspoon	tsp or t
	tablespoon	tbl or T
	fluid ounce	fl oz
	cup	C
	pint	pt
	quart	qt
	gallon	G or gal

Written in order from the smallest to the largest unit of volume:

milliliter
teaspoon
tablespoon
fluid ounce
cup
pint
quart
liter
gallon

The standard volume equivalents or relationships between the volume measures are shown below. Once again, these relationships are constant.

	1 T	=	3 t	=	0.5 fl oz	
	2 T		=	1 fl oz	=	29.59 mL
	1 C	=	16 T	=	48 t	= 8 fl oz
	1 pt	=	2 C		=	16 fl oz
	1 qt	=	2 pt	=	4 C	= 32 fl oz
					33.8 fl oz	= 1000 mL = 1 L
	1 G	=	4 qt	=	8 pt	= 16 C = 128 fl oz



Equivalent volumes. One cup, 1/2 pint, 8 fluid ounces, 16 tablespoons, and 48 teaspoons are all equivalent volumes. Note: This measuring device is correctly marked in fluid ounces. Many volume measuring devices are marked in ounces, which could potentially be confusing. A person using such a device must know it means fluid ounces by volume.

Equivalents can be found by moving across rows in the chart above. For instance, the first row shows us that 1 tablespoon is equivalent to both 3 teaspoons and 0.5 fluid ounce. This means that if you measured 3 teaspoons and poured the contents into a tablespoon, the tablespoon would be exactly full. You can move across the second row and see that 2 tablespoons is equivalent to both 1 fluid ounce and 29.59 milliliters.

It will help your efficiency to have weight equivalents and volume equivalents memorized. Equivalents are used in the process of converting units of measure, which is a necessary part of a foodservice professional's duties. Converting units of measure is addressed in the next section.

1.1 PRACTICE PROBLEMS

For questions 1–9, use your knowledge of standard unit equivalents to help you answer the questions.

- Which object would most likely weigh 1 gram?
 - a peanut
 - a strawberry
 - a shallot
 - an artichoke
- Which U.S. customary unit is approximately equivalent to 1 liter?
 - 1 pint
 - 1 cup
 - 1 quart
 - 1 gallon

40

3. One pound of butter is most closely equivalent to which of the following metric measures?
- (A) $\frac{1}{4}$ kilogram (B) $\frac{1}{2}$ kilogram
(C) $\frac{3}{4}$ kilogram (D) 1 kilogram
4. One gallon is equivalent to which of the following quantities?
- (A) 4 pints (B) 2 liters
(C) 16 cups (D) 8 pounds
5. If a standard wine bottle holds $\frac{3}{4}$ of a liter, approximately how many fluid ounces does the bottle hold?
- (A) 13 fluid ounces (B) 16 fluid ounces
(C) 25 fluid ounces (D) 32 fluid ounces
6. During dinner service, your chef says to you, "I need 5 cups of chicken stock!" In the walk-in refrigerator, you find four containers of stock. Without leaving your chef short on stock, which container holds an amount that is closest to the quantity that your chef needs?
- (A) 1 quart (B) $1\frac{1}{2}$ quarts
(C) 2 quarts (D) $2\frac{1}{2}$ quarts
7. Your grocery list for a banquet menu includes 1 kilogram of semolina flour. Which of the following bag sizes is closest to the quantity that you need for the recipe, without leaving you short on flour?
- (A) 1 pound (B) $1\frac{1}{2}$ pounds
(C) 2 pounds (D) $2\frac{1}{2}$ pounds
8. Without using any references, fill in the missing numbers in the ten standard equivalents below:
- a. 1 quart = _____ cups
b. 1 kilogram = _____ grams
c. 1 gallon = _____ quarts
d. 1 tablespoon = _____ teaspoons
e. 1 cup = _____ fluid ounces
f. 1 pint = _____ cups
g. 1 pound = _____ grams
h. 1 liter = _____ fluid ounces
i. 1 cup = _____ tablespoons
j. 1 kilogram = _____ pounds

9. Match the quantity in the first column with its approximate equivalent in the second column.

- | | |
|--------------------|-------------------|
| a. 1 pound | i. ½ liter |
| b. 2 teaspoons | ii. ½ pound |
| c. 225 grams | iii. ½ kilogram |
| d. 16 fluid ounces | iv. 10 grams |
| e. ½ ounce | v. 10 milliliters |
| f. 280 grams | vi. 10 ounces |

10. For the recipe below, rewrite the given ingredient quantities as approximately equivalent quantities expressed in the unit in the "revised quantity" column.

Example:

INGREDIENT	RECIPE QUANTITY	REVISED QUANTITY
Heavy cream	1 qt	approx. 1 L

Filling for Pecan Diamonds

Makes 100 pieces

(Adapted from *The Professional Chef [8th ed.]* by The Culinary Institute of America)

INGREDIENT	RECIPE QUANTITY	REVISED QUANTITY
Butter, cubed	1 #	kg
Brown sugar, light	1 #	kg
Sugar, granulated	4 oz	g
Honey	12 oz	g
Heavy cream	4 fl oz	mL
Pecans	2 #	kg

62

NOTETAKING IN TEXTBOOKS (Cornell College)

Many students make the mistake of picking up their textbook and reading 50 pages straight through front to back and assuming they are done with their reading assignment. These students will often struggle to participate actively in class discussion and may not do well on the tests. There are better methods for getting the most out of your reading.

The basics:

1. Multiply the number of pages you have to read by 5 minutes. That is the amount of time the average college student needs to spend on their reading assignment. Keep this in mind as you schedule time to do your reading. If you calculate four hours of reading, you might not want to read 7-11 p.m. straight through. Consider getting an hour in before class in the morning or over the lunch break - spread it out a bit.
2. Divide the reading into 10-page chunks. The system described below should be done on the 10-page chunk before you move to the next set of pages and start the method over again.
3. Have a highlighter in hand, a pen or pencil and paper or notecards (depending on your preference). Writing in the book itself is highly recommended, but if you have some reason for not doing that, you might also want post-its and use those on each page in place of writing in the book. If the book is already highlighted by a previous reader (not ideal situation) please use a highlighter of a different color.

The system:

P2R

1. Preview
2. Read Actively (includes reading, highlighting, note-taking)
3. Review

Let's take a closer look. Feel free to grab a textbook to use as example as you read this portion.

Preview:

You would most likely not travel to another country without getting a lay of the land first. Often we read a tourism book or look at a map. We might try to learn a few words in the other language. If the country is similar to our own (England speaks the same language as the U.S. so feels more familiar) we might do less preparation than if it seems very different from our own (Japan has an alphabet/language quite different from the U.S.). This advance preparation allows us to get off the plane and have a sense of what we know and don't know, what questions we will need to ask and where we want to head first.

Previewing a textbook accomplishes much the same thing. Start by looking at the beginning of your 10-page chunk. Read section titles. If no titles, read first lines of paragraphs. Read the last

paragraph. Glance over charts or photos used on the pages. Read study questions or summaries that might be given at the end of the chunk of pages. Now, take a moment to think about what you have just seen. What do you think will be the main topic of that section? What do you already know about it from your childhood, past courses or other readings in this current class? What is your biggest question right now--what more do you need to know?

Now, you have a sense of where you are heading. Hopefully, you are a bit curious about what you will be reading, have some questions in your mind and will be able to fit what you read into a bigger context of where it fits into the whole chapter.

Read Actively:

Do not take notes or highlight as you read; this tends to break up your flow and diminish your understanding. It also isn't very productive, because you don't know if the first sentence is worth taking notes on until after you have read the third sentence, which might be the real point of the paragraph. So, read at least one complete paragraph or a short section before you stop to take notes and highlight.

Your first step after you read the paragraph is to highlight a phrase or two that were the important parts that you'll need to know for future reference. Don't pick just words (too little) or whole sentences (too much). Exceptions to this might be dates or definitions. The idea is that you could re-read JUST the highlighted portion in a month and get the gist of the paragraph without having to re-read the whole paragraph.

Now go to the margins (or your post-its) and start writing a question or two for the paragraph. This might be "What years were considered the Renaissance?" or "What is the meaning of metamorphosis?" When you get done with the entire ten page section, you will go back and try to answer these questions without looking at the book. If you need to cheat and look at the book, you should underline those highlighted notes to show that you need to study that more. If you could answer it, you are doing well on recalling that paragraph.

This is also a good time to make some notes for class. Take a sheet of paper or a notecard and write down questions that you want to ask in class (to understand a concept or to ask how it connects to something else you've read, etc.). Write down any observations or opinions you want to share with the class. You may want to jot down page numbers and quotes that may be useful to discuss in class.

Some people prefer to also make these notes in their margins or at the end of the chapter. That is fine.

Now read the next paragraph or short section (one column, for example) and do the same process as above.

Review:

At the end of the ten-page chunk, take a moment and think about the section you have read in its entirety. Go to a clean sheet of paper or a reading journal and jot down a summary (in your own words, not quotes from book) of what you just read. Then make some broad observations about

What are the professional attributes of an EMT?

- How should I appear?
 - Wear clean uniform, and haircut, clean and approachable. First impression—I am competent and trustworthy.
- What Knowledge and Skills should I have?
 - EMT coursework and procedures
 - how all the equipment works
 - what medications are appropriate
 - how to clean and sterilize everything
 - how to make sure everyone is safe (especially me)
 - geography, how to get around town quickly (construction!)
 - traffic laws, ambulance is big, expensive, and important
- Should I work out?
 - need to lift and carry at least 125lb
 - good eyesight
 - speak clearly and listen closely
 - maybe it is time I learned another language?
- What personal traits should an EMT have?
 - calm and reassuring
 - leadership....take control!
 - good judgement
 - moral...things are not always simple
 - stable and adaptable....things can change in a second
 - good listener
 - resourceful...things are not always the same, think quick on your feet. Car accident ventilation.
 - Cooperative...lead when needed, but step back when necessary
- How do I maintain licensure?
 - I might have to continue to go to school to keep my license active...also, techniques and procedures change, need to keep up to date.

VOCAB:

Auscultated- listening to a part of the body (usually with a stethoscope).

Summary:

Professional attributes such as my appearance, knowledge and skills, physical ability, personal traits, and licensure, are what make me an EMT. These are all things within my control and I can work on all of these to be the best EMT I can be. I think there are things I need to work on, such as my judgement and calmness, but I expect with the training I will receive and a fair amount of practice I will get better. These personal attributes will also play a role in hiring decisions, so I should keep track of times when I demonstrate these attributes.

85



Objectives 7-16 to 7-18

List the functions of the circulatory (cardiovascular) system, the anatomy of the heart, blood, and blood vessels, and the physiology of circulation, transport of gases, and cell metabolism.



Key Terms

circulatory system the body system that transports blood to all parts of the body. Includes the heart, blood vessels, and blood. Also called the *cardiovascular system*.

The Circulatory System

The **circulatory system** is composed of the heart, blood vessels, and blood (Figure 7-25a*). It is a closed system that transports blood to all parts of the body. Blood brings oxygen, nutrients, and other essential chemical elements to tissue cells, and removes carbon dioxide and other waste products resulting from cell metabolism.

The circulatory system has several functions:

- Providing a medium for perfusion of cells with oxygen and other nutrients and removal from the cells of carbon dioxide and other waste products
- Transporting blood to cells and the alveoli for gas exchange
- Serving as a reservoir to house blood
- Serving as a medium for buffering the body's acid-base balance
- Providing a mechanism to deliver immune cells and other substances to fight infection
- Containing substances that promote clotting

Basic Anatomy

The Heart The heart, a highly efficient pump, is a chambered muscular organ that lies within the chest in the thoracic cavity between the two lungs. In size and shape, it resembles a closed fist. About two-thirds of its mass is located to the left of the midline of the body. Its lower point, the apex, lies just above the diaphragm.

The *pericardium* is a double-walled sac that encloses the heart, gives support, and prevents friction as the heart moves within this protective sac. The surfaces of the pericardial sac produce a small amount of fluid lubrication needed to facilitate the normal movements of the heart.

The heart has four chambers. (The flow of blood to and from the lungs and the body and through the four chambers is shown in Figure 7-25b*.) The upper chambers, called the **atria**, receive blood from the veins. The right atrium receives oxygen-depleted blood from the veins of the body. The left atrium receives oxygen-rich blood from the pulmonary veins from the lungs.

The lower chambers are called **ventricles**. They pump blood out to the arteries. The right ventricle pumps oxygen-depleted blood to the pulmonary arteries, which transport the blood to the lungs where it will be oxygenated. The left ventricle pumps oxygen-rich blood to the major artery from the heart, the aorta (see the de-

scription that follows), from which the blood is gradually delivered to all body cells.

A series of **valves** between the chambers of the heart keep the blood flowing in one direction and prevent the backflow of blood. The four valves are:

- **Tricuspid valve.** Between the right atrium and the right ventricle
- **Pulmonary valve.** At the base of the pulmonary artery in the right ventricle
- **Mitral valve, also known as the bicuspid valve.** Between the left atrium and the left ventricle
- **Aortic valve.** At the base of the aortic artery in the left ventricle

The heart is composed of specialized contractile and conductive muscle that responds to electrical impulses. A sophisticated cardiac conduction system (Figure 7-25c*) causes the *myocardium*, or middle layer of muscle, to contract and eject blood from the heart. The electrical impulse originates at the *sinoatrial (SA) node* and travels to the *atrioventricular (AV) node*, which is located between the atria and the ventricles, and finally through the *bundle of His* to the *Purkinje fibers* to the ventricles. As the heart muscle contracts, blood is propelled through the pulmonary arteries and to the lungs and into the aorta. From the aorta, it is eventually circulated throughout the body.

The Arteries An artery carries blood away from the heart (Figure 7-26a*). All arteries except the pulmonary arteries carry oxygen-rich blood. The major arteries include the following:

- **Aorta**—The major artery from the heart, the aorta, lies in front of the spine and passes through the thoracic and abdominal cavities. At about the level of the navel, the aorta divides into the iliac arteries, allowing blood to travel down each leg. The aorta and its branches supply all other arteries with blood.
- **Coronary arteries**—The coronary arteries are the vessels that supply the heart itself with blood (Figure 7-25d*).
- **Carotid arteries**—The carotid arteries (one on each side of the neck) supply the brain and head with blood. Pulsations of the carotid arteries can be felt on either side of the neck.
- **Femoral arteries**—The femoral artery is the major artery of the thigh and supplies the groin and leg

Cardiovascular System

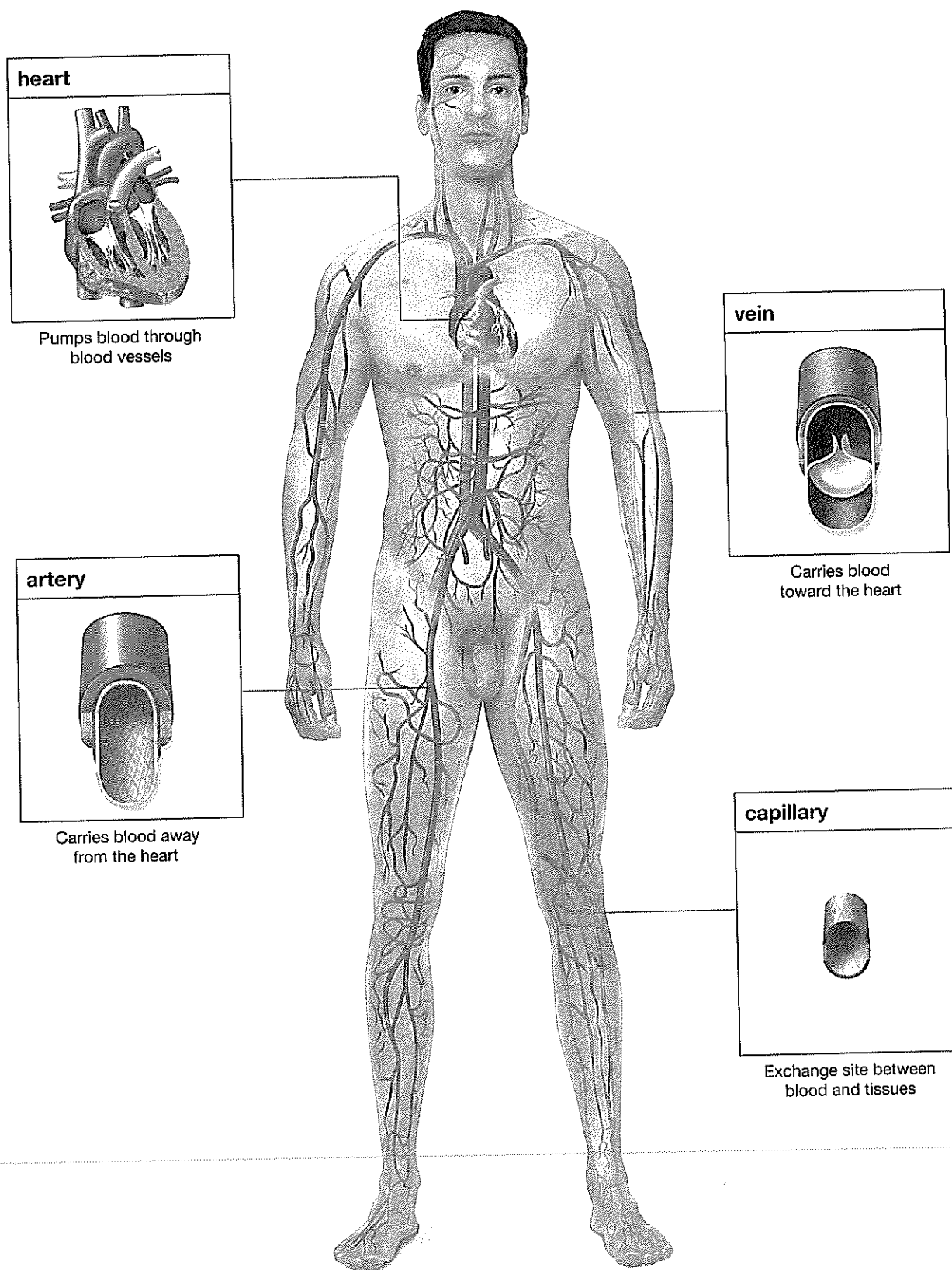


FIGURE 7-25a * The circulatory system. (Red indicates arteries; blue indicates veins.)

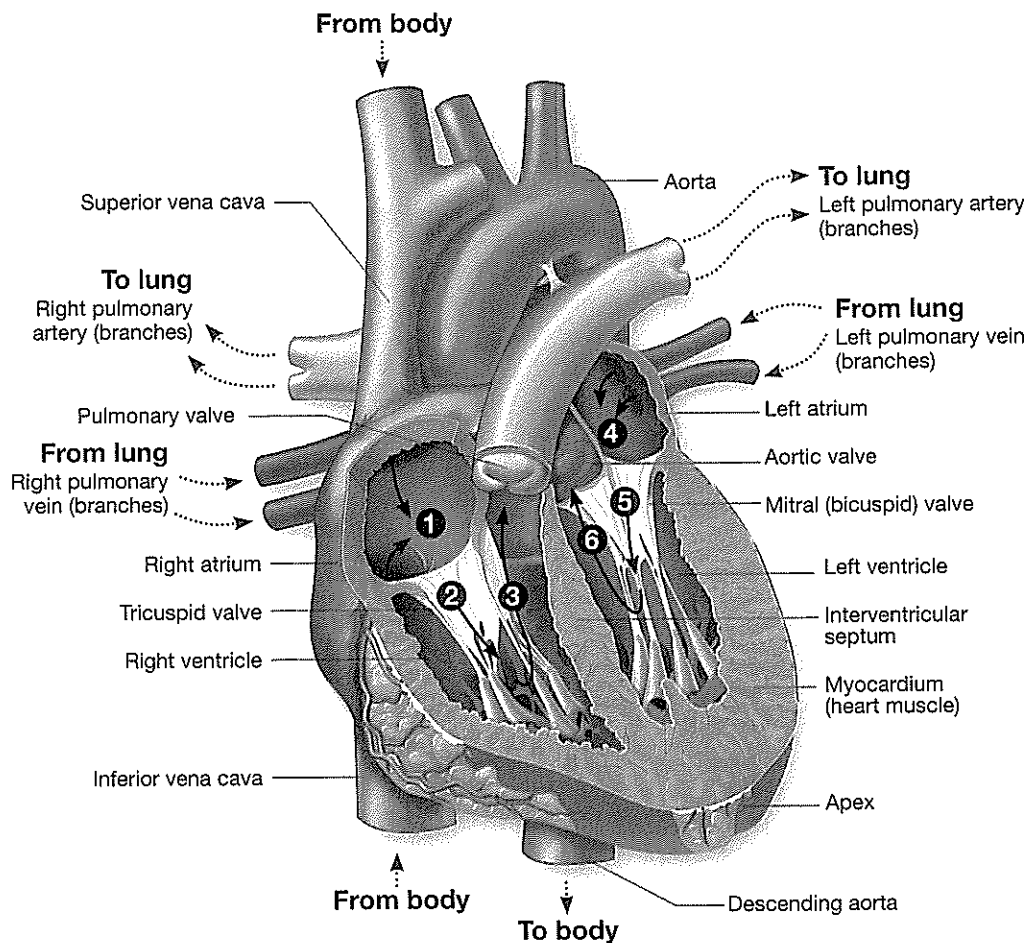


FIGURE 7-25b * Blood flow through the chambers of the heart.

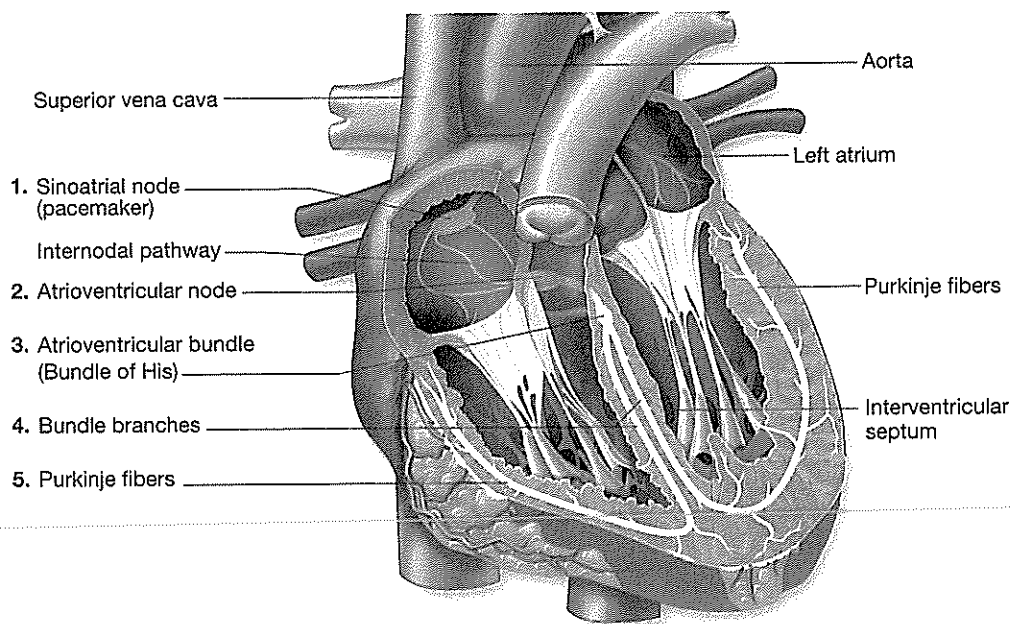


FIGURE 7-25c * The cardiac conduction system.

Name: _____

Date: _____

CA EMT Bridge Quiz 4: Circulation

1. All of the following are part of the composition of blood, EXCEPT:

- A. White Blood Cells
- B. Red Blood Cells
- C. Bicarbonate
- D. Platelets
- E. Plasma

2. The chamber that pumps oxygen-rich blood out from the heart for distribution to the rest of the body is the:

- A. Right atrium
- B. Right ventricle
- C. Right systolic
- D. Left atrium
- E. Left ventricle

3. The largest artery in the body is the:

- A. Aorta
- B. Carotid
- C. Pulmonary
- D. Femoral
- E. Coronary

4. The blood vessels where gases nutrients, and waste products are exchanged between the body's cells and the bloodstream are the:

- A. Arteries
 - B. Venules
 - C. Capillaries
 - D. Arterioles
 - E. Veins
-

5. The component of blood that has a primary function of carrying oxygen to tissue is:

- A. Red blood cells
- B. Plasma
- C. White Blood Cells
- D. Bicarbonate
- E. Platelets

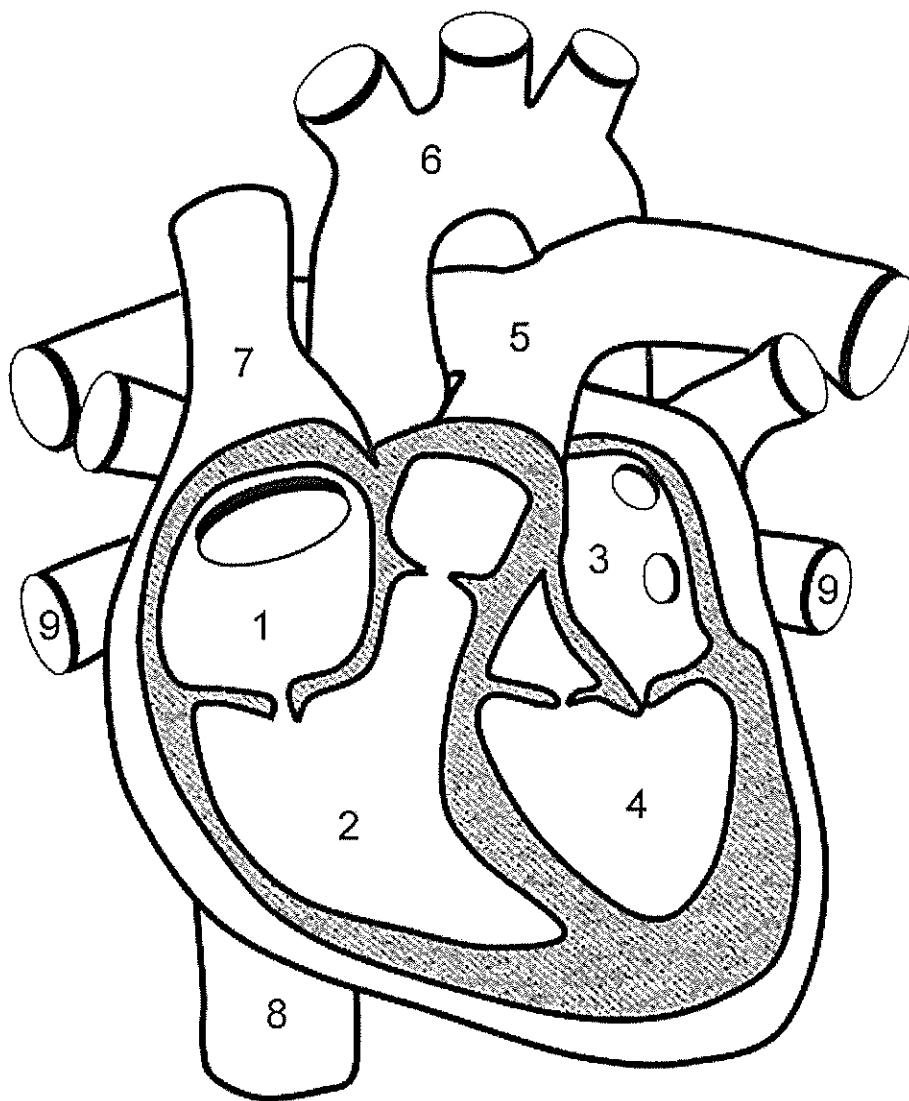
6. The adequate supply of oxygen and nutrients to the organs and tissues of the body is called:

- A. Automaticity
- B. Conduction
- C. Perfusion
- D. Metabolism
- E. Autonomicity

7. The _____ pressure is exerted against the walls of the arteries when the left ventricle contracts. The _____ pressure is exerted against the walls of the arteries when the left ventricle is at rest, or between contractions.

- A. Hydrostatic; diastolic
 - B. Systolic; hydrostatic
 - C. Carotid; femoral
 - D. Diastolic; systolic
 - E. Systolic; diastolic
-

8. Label:



EXTRA CREDIT:

Define (please write in complete sentences)

1. Vein:

2. Artery:

Fill in the blank

3. A tiny blood vessel that connects an arteriole to a venule, a _____ has walls that allow for the exchange of gases, nutrients, and waste at the cellular level.

