

Career Info: List of Careers
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)
Estimated Time: 30-45 minutes

National Career Development Standard/Competency:

1. Understanding the influence of a positive self-concept
 - Identify and appreciate personal interests, abilities, and skills
5. Understand the need for positive attitudes toward work and learning
 - Demonstrate a positive attitude toward work
 - Demonstrate positive work attitudes and behaviors
12. Skills in career planning
 - Demonstrate skills necessary to compare education and job opportunities

Goal:

Students will identify what elements of a career are important to them.

Objectives:

- Identify what is important in a career choice
- Evaluate careers based on preferences
- Understand the importance of choosing a career that matches personality, interests, and values
- Use GACollege411 as a source for career information and career-matching tools

Materials:

- 10th Grade Career Development Advisement Activity #5 handouts: **Air Traffic Controllers; Child Care Workers; Dentists; Educational Psychologists; Graphic Designers; Police Detectives; Police, Fire, and Ambulance Dispatchers; Sheet Metal Workers; Surveyors; and Tile and Marble Setters**
- Alarm clock

Activity:

1. *Greet students as they enter the room.*
2. *Tell students that you are allowing them a few moments of rest before you start the lesson. Instruct students to put their heads on their desks and/or close their eyes. Allow students to relax for 20-30 seconds before you set off the alarm clock.*
3. *As students raise their heads and open their eyes, take comments from volunteers about what thoughts and feelings are attached to the sound of the alarm clock. (Most students will report negative thoughts and feelings.) Ask students if they want to dread the sound of the alarm clock every morning for the rest of their lives. If they look forward to each day and their daily work activities, they are likely to awaken with optimism and excitement instead of dread and loathing. Indicate how important it is to find a career that provides them with a positive outlook each day.*
4. *Ask students to close their eyes again and imagine their lives in 15 years. What will they be doing for a career? Will they be working indoors or outdoors? Will they*

- travel for work? Who will their coworkers be? What kind of salary will they have? What educational background will they have? What will a typical day entail?*
5. *Separate students into five groups to discuss what is important to them when choosing a career (salary, work environment, education requirements, etc.).*
 6. *After students have completed their discussions, distribute two career information sheets to each group. Instruct students to discuss aspects of the two careers that are important to them. Would this career be a good choice for them? Why or why not? Why are some careers suitable for some and not for others? How can they find careers that are well-suited for them? Allow students to share their findings with the class.*
 7. *Ask students how they would feel if someone arbitrarily assigned them a career. Ask students what action they can take to plan for and choose a career instead of just ending up in a career that is not a good match for them. Discuss the importance of choosing careers that are well-suited to their interests, values, and personalities.*
 8. *Direct students to the Career Info tab on GAcollge411 to find more career information and tools for choosing a rewarding career. Encourage students to complete the career self-assessments to learn more about their interests, personality traits, and career values.*

Evaluation:

Students will be evaluated on their participation in individual and group activities.

Modifications:

If the activity is conducted in a computer lab, instead of giving students copies of the career pages, allow them to select two careers:

1. Go to www.GAcollge411.org
2. Click on the blue Career Info tab
3. Click on List of Careers on the left menu
4. Choose two occupations to explore

Air Traffic Controllers
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Control air traffic on and within vicinity of airport and movement of air traffic between altitude sectors and control centers according to established procedures and policies. Authorize, regulate, and control commercial airline flights according to government or company regulations to expedite and ensure flight safety.

Experience

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Education

- Most of these occupations require a four-year bachelor's degree, but some do not.
- Training
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.
- Tasks
- Determines timing of and procedure for flight vector changes in sector.
- Communicates with, relays flight plans to, and coordinates movement of air traffic between control centers.
- Controls air traffic at and within vicinity of airport.
- Completes daily activity report and keeps record of messages from aircraft.
- Directs radio searches for aircraft and alerts control centers/emergency facilities of flight difficulties.
- Transfers control of departing flights to traffic control center and accepts control of arriving flights from air traffic control center.
- Inspects, adjusts, and controls radio equipment and airport lights.

- Issues landing and takeoff authorizations and instructions, and communicates other information to aircraft.
- Relays air traffic information, such as altitude, expected time of arrival, and course of aircraft to control centers.
- Analyzes factors, such as weather reports, fuel requirements, and maps, to determine flights and air routes.
- Recommends flight path changes to planes traveling in storms or fog or in emergency situations.
- Reviews records and reports for clarity and completeness and maintains records and reports.

National Average Salary

\$83,350.00/year

Average Salary in Georgia

Entry level: \$73,610.00/year

Average (mean) salary: \$108,048.00/year

Important Abilities

1. Written Comprehension
2. Oral Comprehension
3. Oral Expression
4. Near Vision
5. Speech Clarity

General Work Activities

1. Monitor Processes, Material, Surroundings
2. Getting Information Needed to Do the Job
3. Identifying Objects, Actions, and Events
4. Communicating With Other Workers
5. Making Decisions and Solving Problems

Important Skills

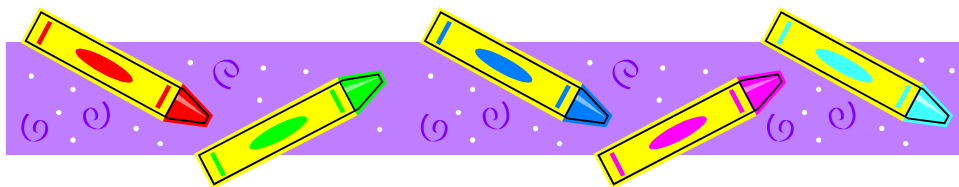
1. Active Listening
2. Operation and Control
3. Operation Monitoring
4. Coordination
5. Critical Thinking

Frequent Work Context

1. Consequence of Error
2. Responsible for Others' Health & Safety
3. Job-Required Social Interaction
4. Importance of Being Exact or Accurate
5. Importance of Being Sure All Is Done

Related Careers

- Locomotive Engineers
- Mates, Ship, Boat, and Barge
- Public Transportation Inspectors
- Rail Yard Engineers, Dinkey Operators, and Hostlers
- Railroad Conductors and Yardmasters
- Traffic Technicians



Child Care Workers
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Attend to children at schools, businesses, private households, and child care institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.

Experience

No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a general office clerk even if he/she has never worked in an office before.

Education

These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

Training

Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Tasks

- Cares for children in institutional setting, such as group homes, nursery schools, private businesses, or schools for the handicapped.
- Disciplines children and recommends or initiates other measures to control behavior, such as caring for own clothing and picking up toys and books.
- Assists in preparing food for children and serves meals and refreshments to children and regulates rest periods.
- Wheels handicapped children to classes or other areas of facility, secure in equipment, such as chairs and slings.
- Monitors children on life-support equipment to detect malfunctioning of equipment and calls for medical assistance when needed.

- Instructs children regarding desirable health and personal habits, such as eating, resting, and toilet habits.
- Places or hoists children into baths or pools.
- Organizes and participates in recreational activities, such as games.
- Reads to children and teaches them simple painting, drawing, handwork, and songs.

National Average Salary

\$16,980.00/year

Average Salary in Georgia

Entry level: \$12,719.00/year

Average (mean) salary: \$15,468.00/year

Important Abilities

1. Oral Expression
2. Oral Comprehension
3. Time Sharing
4. Problem Sensitivity
5. Written Comprehension

General Work Activities

1. Assisting and Caring for Others
2. Performing General Physical Activities
3. Establishing & Maintaining Relationships
4. Handling and Moving Objects
5. Communicating With Other Workers

Important Skills

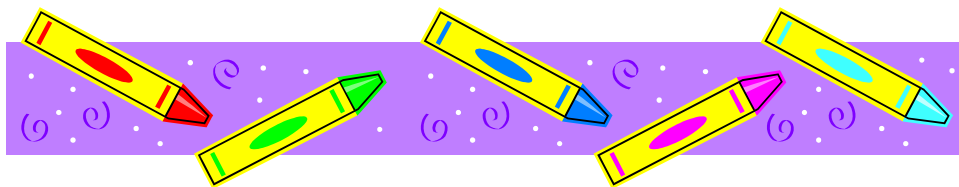
1. Social Perceptiveness
2. Speaking
3. Active Listening
4. Service Orientation
5. Learning Strategies

Frequent Work Context

1. Job-Required Social Interaction
2. Objective or Subjective Information
3. Provide a Service to Others
4. Consequence of Error
5. Responsible for Others' Health & Safety

Related Careers

- Home Health Aides
- Personal and Home Care Aides



Dentists
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Diagnose and treat diseases, injuries, and malformations of teeth and gums and related oral structures. May treat diseases of nerve, pulp, and other dental tissues affecting vitality of teeth.

Experience

Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience. For example, surgeons must complete four years of college and an additional five to seven years of specialized medical training to be able to do their job.

Education

A bachelor's degree is the minimum formal education required for these occupations. However, many also require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).

Training

Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Tasks

- Fills, extracts, and replaces teeth, using rotary and hand instruments, dental appliances, medications, and surgical implements.
- Applies fluoride and sealants to teeth.
- Treats exposure of pulp by pulp capping, removal of pulp from pulp chamber, or root canal, using dental instruments.
- Fills pulp chamber and canal with endodontic materials.
- Examines teeth, gums, and related tissues to determine condition, using dental instruments, x-ray, and other diagnostic equipment.

- Eliminates irritating margins of fillings and corrects occlusions, using dental instruments.
- Plans, organizes, and maintains dental health programs.
- Produces and evaluates dental health educational materials.
- Fits and adjusts prosthodontic appliances in patient's mouth.
- Fabricates prosthodontic appliances, such as space maintainers, bridges, dentures, and obturating appliances.
- Counsels and advises patients about growth and development of dental problems and preventive oral health care services.
- Analyzes and evaluates dental needs to determine changes and trends in patterns of dental disease.
- Restores natural color of teeth by bleaching, cleaning, and polishing.
- Removes pathologic tissue or diseased tissue using surgical instruments.
- Formulates plan of treatment for patient's teeth and mouth tissue.
- Treats infected root canal and related tissues.

Important Abilities

1. Arm-Hand Steadiness
2. Control Precision
3. Oral Expression
4. Oral Comprehension
5. Problem Sensitivity

General Work Activities

1. Assisting and Caring for Others
2. Handling and Moving Objects
3. Getting Information Needed to Do the Job
4. Making Decisions and Solving Problems
5. Identifying Objects, Actions, and Events

Important Skills

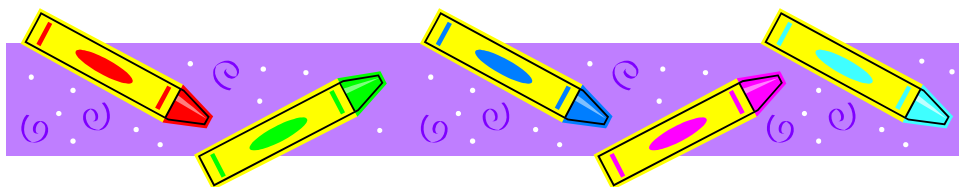
1. Reading Comprehension
2. Problem Identification
3. Critical Thinking
4. Science
5. Active Learning

Frequent Work Context

1. Job-Required Social Interaction
2. Importance of Being Exact or Accurate
3. Importance of Being Sure All Is Done
4. Consequence of Error
5. Provide a Service to Others

Related Careers

- Dental Hygienists
- Optometrists
- Oral and Maxillofacial Surgeons
- Orthodontists
- Physician Assistants
- Prosthodontists
- Respiratory Therapists



Educational Psychologists
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Investigate processes of learning and teaching and develop psychological principles and techniques applicable to educational problems.

Experience

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Education

Most of these occupations require a four-year bachelor's degree, but some do not.

Training

Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Tasks

- Conducts experiments to study educational problems, such as motivation, adjustment, teacher training, and individual differences in mental abilities.
- Conducts research to aid introduction of programs in schools to meet current psychological, educational, and sociological needs of children.
- Interprets and explains test results, in terms of norms, reliability, and validity, to teachers, counselors, students, and other entitled parties.
- Plans remedial classes and testing programs designed to meet needs of special students.
- Formulates achievement, diagnostic, and predictive tests to aid teachers in planning methods and content of instruction.

- Investigates traits, attitudes, and feelings of teachers to predict conditions that affect teacher's mental health and success with students.
- Advises teachers and other school personnel on methods to enhance school and classroom atmosphere to maximize student learning and motivation.
- Evaluates needs, limitations, and potentials of child, through observation, review of school records, and consultation with parents and school personnel.
- Analyzes characteristics and adjustment needs of students having various mental abilities and recommends educational program to promote maximum adjustment.
- Refers individuals to community agencies to obtain medical, vocational, or social services for child or family.
- Advises school board, superintendent, administrative committees, and parent-teacher groups regarding provision of psychological services within educational system or school.
- Counsels pupils individually and in groups to assist pupils to achieve personal, social, and emotional adjustment.
- Recommends placement of students in classes and treatment programs based on individual needs.
- Collaborates with education specialists in developing curriculum content and methods of organizing and conducting classroom work.
- Administers standardized tests to evaluate intelligence, achievement, and personality and to diagnose disabilities and difficulties among students.

National Average Salary

\$53,500.00/year

Important Abilities

1. Oral Expression
2. Written Comprehension
3. Written Expression
4. Inductive Reasoning
5. Problem Sensitivity

General Work Activities

1. Getting Information Needed to Do the Job
2. Judging Qualities of Things, Service, People
3. Analyzing Data or Information
4. Identifying Objects, Actions, and Events
5. Making Decisions and Solving Problems

Important Skills

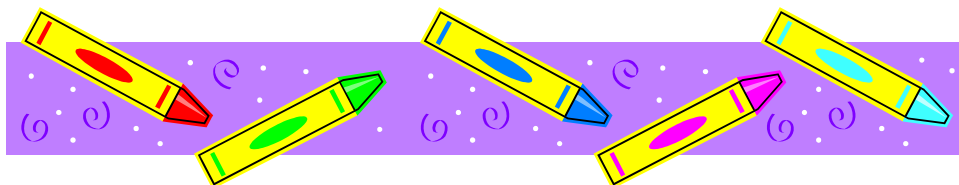
1. Reading Comprehension
2. Writing
3. Information Gathering
4. Social Perceptiveness
5. Active Listening

Frequent Work Context

1. Job-Required Social Interaction
2. Consequence of Error
3. Importance of Being Sure All Is Done
4. Objective or Subjective Information
5. Frustrating Circumstances

Related Careers

- Directors, Religious Activities and Education
- Educational, Vocational, and School Counselors
- Elementary School Teachers, Except Special Education
- Instructional Coordinators
- Kindergarten Teachers, Except Special Education
- Occupational Therapists



Graphic Designers
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.

Experience

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Education

Most of these occupations require a four-year bachelor's degree, but some do not.

Training

Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Tasks

- Draws sample of finished layout and presents sample to art director for approval.
- Produces still and animated graphic formats for on-air and taped portions of television news broadcasts, using electronic video equipment.
- Prepares illustrations or rough sketches of material according to instructions of client or supervisor.
- Develops negatives and prints, using negative- and print-developing equipment and tools and work aids to produce layout photographs.
- Prepares notes and instructions for workers who assemble and prepare final layouts for printing.
- Photographs layouts, using camera, to make layout prints for supervisor or client.

- Confers with client regarding layout design.
- Prepares series of drawings to illustrate sequence and timing of story development for television production.
- Reviews final layout and suggests improvements as needed.
- Studies illustrations and photographs to plan presentation of material, product, or service.
- Draws and prints charts, graphs, illustrations, and other artwork, using computer.
- Marks up, pastes, and assembles final layouts to prepare layouts for printer.
- Keys information into computer equipment to create layouts for client or supervisor.
- Determines size and arrangement of illustrative material and copy and selects style and size of type.
- Arranges layout based upon available space, knowledge of layout principles, and esthetic design concepts.

National Average Salary

\$39,670.00/year

Average Salary in Georgia

Entry level: \$27,215.00/year

Average (mean) salary: \$41,624.00/year

Important Abilities

1. Originality
2. Fluency of Ideas
3. Visualization
4. Visual Color Discrimination
5. Oral Expression

General Work Activities

1. Thinking Creatively
2. Getting Information Needed to Do the Job
3. Drafting & Specifying Technical Devices, etc.
4. Interacting With Computers
5. Handling and Moving Objects

Important Skills

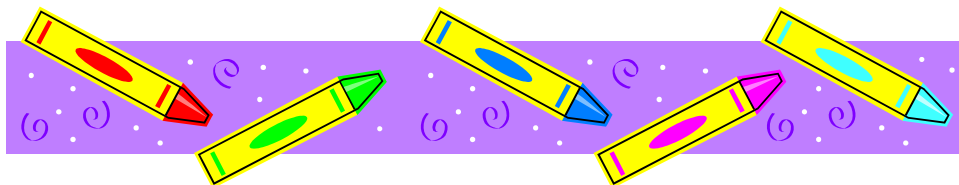
1. Information Organization
2. Idea Generation
3. Reading Comprehension
4. Active Listening
5. Equipment Selection

Frequent Work Context

1. Objective or Subjective Information
2. Indoors
3. Sitting
4. Provide a Service to Others
5. Job-Required Social Interaction

Related Careers

- Art Directors
- Camera Operators, Television, Video, and Motion Picture
- Cartoonists
- Commercial and Industrial Designers
- Directors, Stage, Motion Pictures, Television, and Radio
- Fashion Designers
- Interior Designers
- Makeup Artists, Theatrical and Performance
- Painters and Illustrators
- Set Designers



Police Detectives
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Conduct investigations to prevent crimes or solve criminal cases.

Experience

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Education

Most of these occupations require a four-year bachelor's degree, but some do not.

Training

Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Tasks

- Examines scene of crime to obtain clues and gather evidence.
- Investigates establishments or persons to establish facts supporting complainant or accused, using supportive information from witnesses or tangible evidence.
- Interviews complainant, witnesses, and accused persons to obtain facts or statements; and records interviews, using recording device.
- Schedules polygraph test for consenting parties and records results of test interpretations for presentation with findings.
- Testifies before court and grand jury and appears in court as witness.
- Prepares assigned cases for court and charges or responses to charges, according to formalized procedures.
- Reviews governmental agency files to obtain identifying data pertaining to suspects or establishments suspected of violating laws.

- Observes and photographs narcotic purchase transaction to compile evidence and protect undercover investigators.
- Records progress of investigation, maintains informational files on suspects, and submits reports to commanding officer or magistrate to authorize warrants.
- Arrests or assists in arrest of criminals or suspects.
- Maintains surveillance of establishments to attain identifying information on suspects.

National Average Salary

\$52,150.00/year

Important Abilities

1. Inductive Reasoning
2. Oral Comprehension
3. Oral Expression
4. Deductive Reasoning
5. Written Comprehension

General Work Activities

1. Getting Information Needed to Do the Job
2. Analyzing Data or Information
3. Identifying Objects, Actions, and Events
4. Documenting/Recording Information
5. Making Decisions and Solving Problems

Important Skills

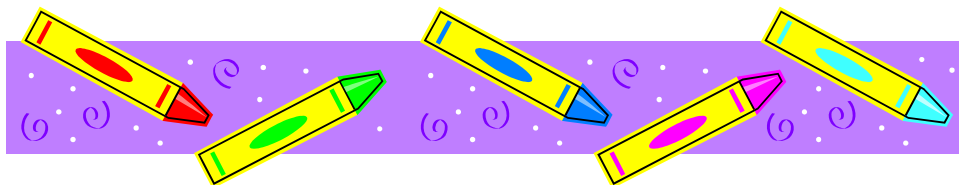
1. Information Gathering
2. Critical Thinking
3. Active Listening
4. Speaking
5. Active Learning

Frequent Work Context

1. Job-Required Social Interaction
2. Frustrating Circumstances
3. Consequence of Error
4. Importance of Being Exact or Accurate
5. Importance of Being Sure All Is Done

Related Careers

- Child Support, Missing Persons, and Unemployment Insurance Fraud Investigators
- Correctional Officers and Jailers
- Criminal Investigators and Special Agents
- Fire Inspectors
- Fire Investigators
- Immigration and Customs Inspectors
- Private Detectives and Investigators
- Security Guards
- Sheriffs and Deputy Sheriffs
- Transit and Railroad Police



Police, Fire, and Ambulance Dispatchers
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Receive complaints from public concerning crimes and police emergencies. Broadcast orders to police patrol units in vicinity of complaint to investigate. Operate radio, telephone, or computer equipment to receive reports of fires and medical emergencies and relay information or orders to proper officials.

Experience

Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a drywall installer might benefit from experience installing drywall, but an inexperienced person could still learn to be an installer with little difficulty.

Education

These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate or bachelor's degree could be needed.

Training

Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Tasks

- Questions caller, observes alarm register, and scans map to determine if emergency is within service area.
- Determines response needed to emergency.
- Scans status charts and computer screen to determine emergency units available for response.
- Provides instructions to caller, utilizing knowledge of emergency medical care.
- Coordinates emergency requests and dispatches response units to emergency, using radio or alarm system.

- Records details of calls, dispatches, and messages and maintains logs and files, using computer.
- Receives incoming calls by telephone or alarm system.
- Tests and adjusts communication and alarm systems and reports malfunctions to maintenance units.
- Contacts officers to verify assignment locations.
- Monitors alarm system to detect fires, illegal entry into establishments, or other emergencies.
- Operates telecommunication equipment to relay information and messages to and from emergency site, and between law enforcement agencies.
- Questions caller to determine nature of problem and type and number of personnel and equipment needed.

National Average Salary

\$27,670.00/year

Average Salary in Georgia

Entry level: \$18,552.00/year

Average (mean) salary: \$25,421.00/year

Important Abilities

1. Oral Comprehension
2. Speed of Closure
3. Speech Clarity
4. Oral Expression
5. Speech Recognition

General Work Activities

1. Communicating With Persons Outside Organization
2. Getting Information Needed to Do the Job
3. Monitor Processes, Material, Surroundings
4. Assisting and Caring for Others
5. Communicating With Other Workers

Important Skills

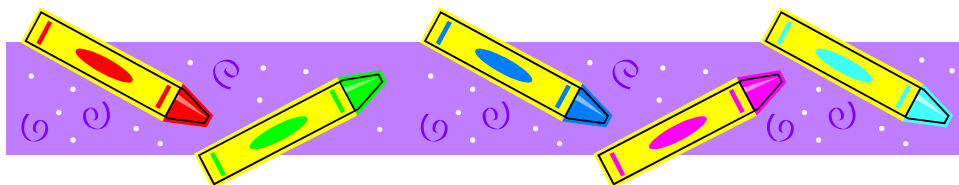
1. Active Listening
2. Problem Identification
3. Service Orientation
4. Speaking
5. Information Gathering

Frequent Work Context

1. Job-Required Social Interaction
2. Objective or Subjective Information
3. Consequence of Error
4. Deal with External Customers
5. Frustrating Circumstances

Related Careers

- Bill and Account Collectors
- Counter and Rental Clerks
- Credit Checkers
- Dispatchers, Except Police, Fire, and Ambulance
- Radio Operators
- Railroad Conductors and Yardmasters
- Travel Clerks
- Welfare Eligibility Workers and Interviewers



Sheet Metal Workers
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Fabricate, assemble, install, and repair sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. Work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using hammer; operating soldering and welding equipment to join sheet metal parts; inspecting, assembling, and smoothing seams and joints of burred surfaces.

Experience

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Education

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Training

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Tasks

- Lays out and marks dimensions and reference lines on material, using scribes, dividers, squares, and rulers.
- Installs assemblies in supportive framework according to blueprints, using hand tools, power tools, and lifting and handling devices.
- Trims, files, grinds, deburrs, burrs, and smooths surfaces, using hand tools and portable power tools.

- Welds, solders, bolts, rivets, screws, clips, caulks, or bonds component parts to assemble products, using hand tools, power tools, and equipment.
- Inspects assemblies and installation for conformance to specifications, using measuring instruments, such as calipers, scales, dial indicators, gauges, and micrometers.
- Selects gauge and type of sheet metal or nonmetallic material, according to product specifications.
- Shapes metal material over anvil, block, or other form, using hand tools.
- Sets up and operates fabricating machines, such as shears, brakes, presses, and routers, to cut, bend, block, and form materials.
- Determines sequence and methods of fabricating, assembling, and installing sheet metal products, using blueprints, sketches, or product specifications.

National Average Salary

\$36,350.00/year

Average Salary in Georgia

Entry level: \$21,595.00/year

Average (mean) salary: \$34,484.00/year

Important Abilities

1. Information Ordering
2. Written Comprehension
3. Control Precision
4. Static Strength
5. Manual Dexterity

General Work Activities

1. Handling and Moving Objects
2. Performing General Physical Activities
3. Controlling Machines and Processes
4. Getting Information Needed to Do the Job
5. Inspecting Equipment, Structures, Material

Important Skills

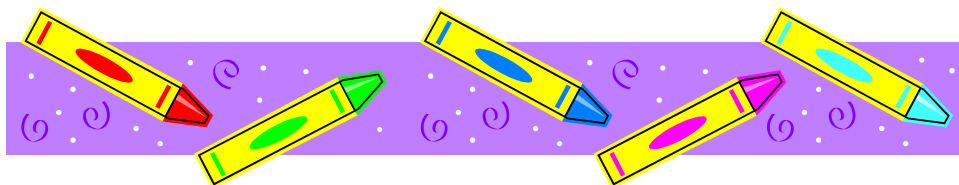
1. Installation
2. Product Inspection
3. Equipment Selection
4. Operation and Control
5. Mathematics

Frequent Work Context

1. Indoors
2. Consequence of Error
3. Importance of Being Exact or Accurate
4. Degree of Automation
5. Using Hands on Objects, Tools, Controls

Related Careers

- Coil Winders, Tapers, and Finishers
- Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
- Grinding, Honing, Lapping, and Deburring Machine Set-Up Operators
- Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
- Paper Goods Machine Setters, Operators, and Tenders
- Precision Mold and Pattern Casters, except Nonferrous Metals
- Semiconductor Processors
- Tool and Die Makers



Surveyors
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

Experience

A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Education

Most of these occupations require a four-year bachelor's degree, but some do not.

Training

Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Tasks

- Surveys water bodies to determine navigable channels and to secure data for construction of breakwaters, piers, and other marine structures.
- Analyzes survey objectives and specifications, utilizing knowledge of survey uses.
- Prepares survey proposal or directs one or more phases of survey proposal preparation.
- Drafts or directs others to draft maps of survey data.
- Determines appropriate and economical methods and procedures for establishing survey control.
- Coordinates findings with work of engineering and architectural personnel, clients, and others concerned with project.

- Computes data necessary for driving and connecting underground passages, underground storage, and volume of underground deposits.
- Keeps accurate notes, records, and sketches to describe and certify work performed.
- Takes instrument readings of sun or stars and calculates longitude and latitude to determine specific area location.
- Studies weight, shape, size, and mass of earth, and variations in earth's gravitational field, using astronomic observations and complex computation.
- Estimates cost of survey.
- Locates and marks sites selected for geophysical prospecting activities, such as locating petroleum or mineral products.
- Conducts research in surveying and mapping methods using knowledge of techniques of photogrammetric map compilation, electronic data processing, and flight and control planning.
- Computes geodetic measurements and interprets survey data to determine position, shape, and elevations of geomorphic and topographic features.
- Prepares charts and tables and makes precise determinations of elevations and records other characteristics of terrain.
- Establishes fixed points for use in making maps, using geodetic and engineering instruments.
- Plans ground surveys designed to establish baselines, elevations, and other geodetic measurements.
- Determines photographic equipment to be used, altitude from which to photograph terrain, and directs aerial surveys of specified geographical area.

National Average Salary

\$41,510.00/year

Average Salary in Georgia

Entry level: \$22,940.00/year

Average (mean) salary: \$36,200.00/year

Important Abilities

1. Written Expression
2. Mathematical Reasoning

3. Number Facility
4. Oral Expression
5. Near Vision

General Work Activities

1. Getting Information Needed to Do the Job
2. Analyzing Data or Information
3. Estimating Needed Characteristics
4. Processing Information
5. Identifying Objects, Actions, and Events

Important Skills

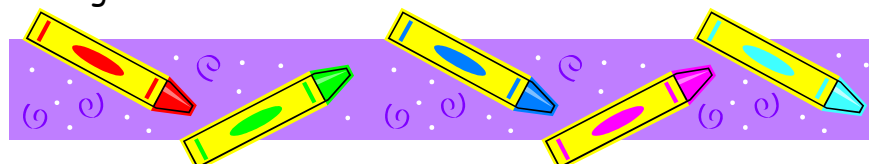
1. Mathematics
2. Information Gathering
3. Writing
4. Reading Comprehension
5. Science

Frequent Work Context

1. Importance of Being Exact or Accurate
2. Importance of Being Sure All Is Done
3. Job-Required Social Interaction
4. Responsibility for Outcomes and Results
5. Coordinate or Lead Others

Related Careers

- Appraisers, Real Estate
- Cartographers and Photogrammetrists
- Commercial and Industrial Designers
- Compensation, Benefits, and Job Analysis Specialists
- Electrical Drafters
- Geological Data Technicians
- Landscape Architects
- Mapping Technicians
- Range Managers



Tile and Marble Setters
10th Grade Career Development Advisement Activity #5
Teacher as Advisor Program (TAP)

Description

Apply hard tile, marble, and wood tile to walls, floors, ceilings, and roof decks.

Experience

Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a drywall installer might benefit from experience installing drywall, but an inexperienced person could still learn to be an installer with little difficulty.

Education

These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate or bachelor's degree could be needed.

Training

Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Tasks

- Installs and anchors fixtures in designated positions, using hand tools.
- Mixes and applies mortar or cement to edges and ends of drain tiles to seal halves and joints.
- Cuts and shapes tile, using tile cutters and biters.
- Selects tile and other items to be installed, such as bathroom accessories, walls, panels, and cabinets, according to specifications.
- Spreads mastic or other adhesive base on roof deck to form base for promenade tile, using serrated spreader.
- Cuts tile backing to required size, using shears.
- Measures and marks surfaces to be tiled and lays out work, following blueprints.
- Tacks lath to wall and ceiling surfaces, using staple gun or hammer.

- Wipes grout between tiles and removes excess, using wet sponge.
- Positions and presses or taps tile with trowel handle to affix tile to plaster or adhesive base.
- Brushes glue onto manila paper on which design has been drawn and positions tile's finished side down onto paper.
- Spreads plaster or concrete over surface to form tile base and levels to specified thickness, using brush, trowel, and screed.
- Measures and cuts metal lath to size for walls and ceilings, using tin snips.

National Average Salary

\$37,790.00/year

Average Salary in Georgia

Entry level: \$21,410.00/year

Average (mean) salary: \$29,368.00/year

Important Abilities

1. Visualization
2. Information Ordering
3. Arm-Hand Steadiness
4. Near Vision
5. Extent Flexibility

General Work Activities

1. Handling and Moving Objects
2. Performing General Physical Activities
3. Getting Information Needed to Do the Job
4. Implementing Ideas, Programs, etc.
5. Analyzing Data or Information

Important Skills

1. Installation
2. Mathematics
3. Equipment Selection
4. Product Inspection
5. Monitoring

Frequent Work Context

1. Using Hands on Objects, Tools, Controls
2. Importance of Being Exact or Accurate
3. Importance of Being Sure All Is Done
4. Hazardous Situations
5. Hazardous Situations

Related Careers

- Brickmasons and Blockmasons
- Ceiling Tile Installers
- Drywall Installers
- Helpers, Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
- Reinforcing Iron and Rebar Workers
- Ship Carpenters and Joiners
- Tapers

