Unit One addressed the big picture of labor market realities—which industries are growing, which are shrinking, and technology’s impact on the market. Students interpreted graphs and charts depicting recent employment trends in Construction and learned about a wide range of careers in the sector. They also learned about how technology has impacted the sector, what a labor union is, and the various career families and employer types available in Construction.

Unit Two addressed the inner workings of the job-seeker. What are her interests and passions? What kind of work environment will she enjoy? What careers should she consider based on what she knows about herself and what factors might influence someone making a career change? Students also learned to navigate career database websites, assess their own interests and conduct a group research project about careers in the Construction sector.

In Unit Three, students heard from Construction workers themselves, through firsthand accounts and interviews from workers in text and video. They developed informational interview questions and conducted further research on Construction careers of interest.

In Unit Four, students considered what it takes to prepare for a career in Construction. They learned about common career pathways in the industry and considered how career movement happens in Construction careers. Students also explored the kinds of training and education opportunities available for someone interested in this field.

In Unit Five, students learn how to leverage their existing and potential professional networks for job seeking, explore the job search process, including analyzing help wanted ads, assessing job offers, and engaging with a panel of Construction professionals. They also learn how to become entrepreneurs by reading about Construction workers who have started their own businesses. They also practice using online resources available to New Yorkers looking to become self-employed.
Unit 5 • Summary

1 • IDENTIFYING YOUR NETWORK

Students write a reflection about a personal experience of gathering information from someone they know or have met. They then identify a potential professional network, including people they know and businesses with which they are familiar.

1.1 • Developing Informational Interview Questions

After having identified their professional networks, students develop questions as a research technique, specifically the questions one might ask in an informational interview.

2 • SPOTLIGHT ON GREEN BUILDING CAREERS

Students read a brochure on Green Building careers, then work to infer the personal qualities and skill requirements necessary for each career. Then, they develop questions they have about the careers.

3 • SENTENCE COMBINING: SELF-CARE IN CONSTRUCTION

Construction is one of the most physically demanding career paths someone can choose. Students consider how the physical demands of a job might influence their career choices and what Construction workers can do to take care of themselves physically and mentally. They practice combining sentences with coordinating conjunctions and reading an informational text.

4 • READING SAMPLE HELP WANTED ADS IN CONSTRUCTION*

Students read a selection of help wanted ads from the Construction sector. Some of the ads are very detailed; others are not. Students ask questions about and make inferences from the ads to figure out what each job entails and match a fictitious job applicant to the job ad that seems the best fit for them.

5 • ASSESSING JOB OFFERS IN CONSTRUCTION*

Students assess two job offers with different wages, work hours, commutes, and duties. They make various computations of the wages, take personal strengths and preferences into account, and write a response identifying which position they would choose and why.
Unit 5 • Summary

6 • STARTING YOUR OWN BUSINESS SERIES*

Students learn about starting a business. They perform calculations using statistics about small business employment in New York City. They read narratives from New Yorkers who have started their own Construction businesses and practice using some of the online services available to New Yorkers hoping to open their own businesses.

6.1 • Calculating with Percents: Small Businesses in New York City*

Students read a brief passage about small business employment in New York City, then perform calculations using percents and decimals drawn from information in the passage.

6.2 • Small Business Narratives in Construction*

Students read narratives of people who started their own Construction businesses, then consider the steps necessary to open those businesses.

6.3 • The Nuts and Bolts of Launching a Business*

Students research the legal requirements of opening a business. They learn how to use the website of New York City’s Department of Small Business Services* to find the required steps to open the business of their choice.

7 • A PANEL OF CONSTRUCTION PROFESSIONALS

Students have the opportunity to interact directly with Construction professionals. They develop questions for the panelists, then listen to the presentation, asking their questions and taking note of the answers.

8 • MY CAREER MAP

Students map their own career trajectory, including past and current jobs, what they learned from them about themselves, future goals, and steps they can take to reach those goals.

8.1 • Career Map Writing Activity

Students complete a writing activity analyzing their Career Map. They explore jobs they’ve had in the past, why they made the choices they did, and goals they have for the future. Rather than focus on one writing strategy, this activity is designed to be flexible and invites teachers to use the activity as is (good for lower level students) or incorporate a focus on a specific writing skill of their choosing, such as topic sentences, paragraph structure, or transitional sentences.
Identifying Your Network

Students learn how to identify a pool of workers and others who can become a source for gathering career information.

**PREP**

- Be prepared to discuss the terms: **Word of Mouth** and **Networking**.

**MATERIALS**

- Networking handout
- My Network handout
- Journal: Using My Network assignment

**EXPLAIN**

1. Write the term **Word of Mouth** on the board. Ask students what it means.
   - *Information that is passed from one person to another verbally. This is one way of conducting research informally, not by using a website or directory, but by asking another person.*

2. What is a piece of information you have gathered through word of mouth? Write responses on the board.
   - *An app (computer or mobile application); a recommended doctor or healthcare facility; a school or teacher; a job; an apartment; a roommate; a product, such as a hair product or pharmaceutical; a specific staff person, such as a public assistance caseworker; a neighborhood resource, such as an immigration legal practice; a travel route, such as subway or bus directions.*

3. Who have you gotten this information from?
   - *A family member, friend, classmate, teacher, neighbor, member of your house of worship or community group, a local merchant, employee of a service you use, even a stranger.*

4. All these people, and likely more, make up your network. A network of people you know and have access to, even if you might not know them very well. Someone can become part of your network after speaking with or meeting them for the first time. Distribute Journal: Using My Network. Ask a student to read the instructions and summarize the goals of the assignment. If students have trouble thinking of a personal experience using their network, direct them to the list on the board.
Once students have finished writing, ask them to discuss what they wrote about.

How is this similar to and different from networking? What is networking? What are some ways you have learned about careers in general and job opportunities in particular?

A network can include people you know, media, your places of work, businesses you use. Career networking consists of talking to professionals about their career and industry in order to learn about the career, the industry or about job opportunities. It can be informal, such as talking to someone you meet casually, or more formal as in the case of an informational interview in which you sit down and ask a set of predetermined questions. An informational interview is a conversation between someone wanting to learn about a particular career and someone who already works in that career. This is different from a job interview because the job researcher has not yet applied for a position. The purpose of the conversation is to gather knowledge. Sometimes informational interviews can lead to jobs, even though that is not necessarily their goal.

Divide students into groups of 4 and ask each group to discuss how they got one of their jobs, either a current or past job. If they have not held a job, they can ask questions and keep the conversation moving and on task. While students are in discussion, write the following tasks on the board:

- Explain the main ideas
- What is a network?
- Explain the benefits of networking
- Discuss who is in your network

Distribute the Networking handout and ask students to read the article. After reading, they should respond in writing to the first three tasks written on the board, and discuss the last one together. When they are finished reading and writing, ask them to share their responses.

Now you are going to identify your own network, in as broad a way as possible. The key to networking is to cast as wide a net as possible. The purpose is to think about how to make connections you might not think you already have. Distribute the My Network handout and ask students to complete it individually, listing as many names or businesses as they can.
Journal: Using My Network

Write one page about a positive experience you have had using your network to gather information. Include:

- Who gave the recommendation and how you know or met the person.

- What the product or service was.

- A description of your conversation, including questions you asked and information you received.

- The result of this conversation. How did it affect your life?

- Sometimes talking to people, especially new people, can be difficult. What made this conversation possible?
Networking

It’s not what you know, it’s who you know.” This common expression is the basis for understanding the importance of networking as a strategy for career development and exploration. Everyone has a network, even if you don’t realize it, and when it comes to job searching, this network may be just as important as your skills and experience. A personal network is that group of people with whom you interact every day - family, friends, parents of friends, friends of friends, neighbors, teachers, bosses, and co-workers. With these people, information and experiences are exchanged for both social and potential professional reasons. Networking occurs every time you participate in a school or social event, volunteer in the community, visit with members of your religious group, talk with neighbors, strike up a conversation with someone at the store, or connect with friends online.

When networking for the purpose of career development, this means talking with friends, family members, and acquaintances about your goals, your interests, and your dreams. Most people actually learn about job openings through friends, relatives, or others who are part of their personal network, and because each person in your network has a network of his or her own, your potential contacts can grow exponentially. This is important because more often than not, hiring managers would rather talk to a potential candidate who has been recommended by someone they know or already employ. Even if a position is not currently available, networking can lead to informational interviews that can help you not only learn about possible career paths, but also be great exposure for you to be thought of as a potential candidate when a job opens up. An informational interview is not the same as a job interview by any means, but it is probably the most effective form of networking there is. In fact, according to Quintessential Careers, one out of every 12 informational interviews results in a job offer. This is a remarkable number considering the fact that research indicates that only one in every 200 resumes (some studies put the number even higher) results in a job offer.

When it comes to finding a job, you’ve got to network! According to Cornell University’s Career Center, 80% of available jobs are not advertised. These jobs are often referred to as the “hidden job market.”

A note for facilitators: Developing networking skills is important for all youth, but particularly for those with limited work experiences, which is unfortunately often the case for youth with disabilities. By creating opportunities whereby young people can research, talk to, and network with those working in careers of interest, the more likely they will be able to make informed choices regarding their future. For youth who are hesitant to network or take the steps necessary to arrange informational interviews (for any reason), consider using pairs of two for many of the activities in this section. Teaming is one strategy that may help participants feel as if they have the support they need while trying out new skills and learning how to become a strategic and “seasoned” networker.
# My Network

Thinking as broadly as possible, write down as many people with work experience as you can. Some may even be people whose names you don't yet know, but are people you see regularly, such as a shopkeeper or security guard.

<table>
<thead>
<tr>
<th>How I Know This Person</th>
<th>Name and Job</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Connections:</strong></td>
<td></td>
</tr>
<tr>
<td>Friends, Family, Neighbors</td>
<td></td>
</tr>
<tr>
<td><strong>Work Connections:</strong></td>
<td></td>
</tr>
<tr>
<td>Co-workers, Supervisors/Managers</td>
<td></td>
</tr>
<tr>
<td><strong>Places of Business:</strong></td>
<td>Business or Organization</td>
</tr>
<tr>
<td>A place where you do business, such as a store or clinic.</td>
<td></td>
</tr>
<tr>
<td><strong>School Connections:</strong></td>
<td></td>
</tr>
<tr>
<td>Classmates, Teachers, Counselors, Administrators</td>
<td></td>
</tr>
<tr>
<td><strong>Other Connections</strong></td>
<td></td>
</tr>
</tbody>
</table>
Developing Informational Interview Questions

After having identified their professional networks, students develop questions as a research technique, specifically the questions one might ask in an informational interview.

MATERIALS

- *Developing Interview Questions* worksheet

DISCUSS

What are ways you can learn about careers or jobs?

- Help wanted ads, friends, family, co-workers, career guide books, observation.

Today we are going to focus on gathering information from workers themselves. Everyone has a network, whether or not they are aware of it. Who could be included in a network?

- Family, friends, classmate, student, professor, people who work at a particular place of business, acquaintances.

EXPLAIN

1. Distribute the *Developing Interview Questions* worksheet. Ask a student to read aloud the instructions at the top of the page. Check for comprehension by asking students to rephrase the requirements of the assignment.

   When students rephrase instructions they solidify their understanding of the required tasks.

2. Give students time to complete the worksheet and then share their questions with the class.
## Developing Interview Questions

Imagine that you are interviewing a worker about a career you are interested in. Write the questions you will ask them. Think about everything you want to know about working in this field. Ask questions that help you learn about their experience and gain advice from an experienced worker. Use the words below to begin your questions.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td></td>
</tr>
<tr>
<td>Where</td>
<td></td>
</tr>
<tr>
<td>How</td>
<td></td>
</tr>
<tr>
<td>How often</td>
<td></td>
</tr>
<tr>
<td>How much</td>
<td></td>
</tr>
<tr>
<td>Who</td>
<td></td>
</tr>
<tr>
<td>When</td>
<td></td>
</tr>
<tr>
<td>Describe</td>
<td></td>
</tr>
</tbody>
</table>
Spotlight on Green Building Careers

Students read a brochure on Green Building careers, then work to infer the personal qualities and skill requirements necessary for each career. Then, they develop questions they have about the careers.

PREP

- Read Mapping Your Future: Building and Maintaining Green Buildings brochure

MATERIALS

- Mapping Your Future: Building and Maintaining Green Buildings brochure
- Careers in Green Building handout

EXPLAIN

1. Ask students to freewrite for 5-10 minutes in response to the following prompt:

   What do you know about the Construction sector so far? What are some examples of Construction careers? What kinds of places are Construction workers employed?

   Construction laborers, Carpenters, Electricians, Plumbers, Construction Managers, Architects, Engineers (Civil, Mechanical, Electrical), CAD Technicians, Surveyors, Maintenance Mechanics, Masons, Steamfitters and Property Managers all work in Construction. They can work for small, independent businesses or large Construction companies. They can work for governments, hospitals and universities. They can also work for themselves.

2. When students are finished, have them share their freewrites with a partner. Answers may vary.

3. Today we are going to learn about some common careers in the Construction sector that have to do specifically with Green Building. What do you think Green Building is?
“A ‘green’ building is a building that, in its design, construction or operation, reduces or eliminates negative impacts on people and the environment, and can create positive impacts on our climate and natural environment. Green buildings preserve precious natural resources and improve our quality of life.”

from http://www.worldgbc.org/what-green-building

Distribute Mapping Your Future: Building and Maintaining Green Buildings handout. Ask students to read and annotate the handout, marking anything that seems important, interesting, or confusing. While they read, they should take note of things they already knew about the field from their pre-writing exercise and new things they learned about it.

DISCUSS

- What do you know now about the field that you didn’t know before reading the career brochure?
- Were you surprised by anything new that you learned?
- If you or someone you know were interested in a career in this field, what are some actions you could take to find out more?

Conduct an informational interview with someone working in the field, explore your personal interests and strengths, use the brochure to answer questions about specific jobs within the field.

- Describe one career you read about that sounds interesting to you.

When students are finished, distribute the Careers in Green Building handout and ask students to complete it in pairs.

When pairs are finished, discuss their answers as a class.
Mapping Your Future

Building and Maintaining Green Buildings

What are Green Buildings?

Buildings constructed today are very different from those built 25 or 50 years ago. People have become more concerned about sustaining our world in a way that will protect natural resources and be healthier for people. Engineers, architects and those that build, operate and maintain buildings have developed methods that use fewer natural resources. These new environmentally friendly buildings are sometimes called green buildings. Green buildings have become much more common in the last 10 years. Creating these new buildings requires skilled workers who understand new design and construction techniques. Also, most buildings that exist today will stand for many years to come. These existing buildings are being renovated to use less electricity, gas and oil.

Many buildings are also being operated in a green way. This means more recycling, using green cleaning products, and keeping constant track of energy usage.

Building and maintaining green buildings includes such things as:

• Choosing a building’s location near public transportation, so people don’t have to drive to work
• Designing the building to use natural light as much as possible during daytime hours
• Putting in energy efficient windows that offer good protection from the cold and heat
• Installing heating and cooling systems and appliances that use less energy and water
• Saving water by using recycled (“gray”) water instead of drinking water to flush toilets, or using less water per flush

• Installing heat recovery systems that use waste heat instead of mechanical power to warm air or water
• Using non-toxic cleaning products and high-quality vacuum cleaners
• Installing more efficient light bulbs and water faucets
• Using renewable energy, such as solar panels or wind turbines

Employers reported that more than a quarter of construction jobs and building services jobs are green. This means that people who perform these jobs produce goods or deliver services that are saving energy. There are more than 75,000 jobs in green construction and energy efficiency in New York City. Workers who understand green practices and concepts will build and maintain better, higher-performing buildings. Green is where the new and better jobs are. All city, school and college construction in New York City must be done sustainably. A lot of private sector construction is green. This trend should grow and continue in the future as energy costs and environmental issues are becoming more important.

Sales plays a role in this field also. Someone must sell a solar system before solar panels can be installed on a roof. Someone must communicate with customers about the energy efficiency assistance programs available before people can take advantage of them. The entry-level sales and marketing jobs are often internships, usually but not always paid.
## Types of Employment

<table>
<thead>
<tr>
<th>HOURS/WEEK</th>
<th>SCHEDULE</th>
<th>WAGE/SALARY</th>
<th>PAYMENT</th>
<th>COMMON BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>Usually 35+</td>
<td>Steady</td>
<td>Annual</td>
<td>Weekly or bi-weekly</td>
</tr>
<tr>
<td>Part-Time</td>
<td>Usually &lt;35</td>
<td>May vary</td>
<td>Hourly</td>
<td>Weekly or bi-weekly</td>
</tr>
<tr>
<td>Temp</td>
<td>As needed by employer</td>
<td>May vary</td>
<td>Hourly</td>
<td>Weekly or bi-weekly</td>
</tr>
<tr>
<td>Per Diem</td>
<td>As needed by employer</td>
<td>Daily or Per Shift</td>
<td>Hourly</td>
<td>Weekly or bi-weekly</td>
</tr>
<tr>
<td>Self-employed aka Freelance</td>
<td>Varies</td>
<td>Varies</td>
<td>Negotiate rate of pay with client</td>
<td>Upon completion of work or on a schedule of deliverables</td>
</tr>
<tr>
<td>Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### What are some sample career paths that people can follow?

Industry experts say that people move up based on their technical ability and their social and workplace skills. The better they perform in their jobs and the more they excel, the more likely they’ll be promoted. Within the solar industry, people move from roofer to solar installer, from the field to the office and then to being a supervisor. To move up from being a construction worker to a construction manager, a person needs a college degree.

There are career pathways in building maintenance within residential buildings, from porter to doorman or handyman, and then potentially to building superintendent. Many of these jobs are covered by labor union agreements. To take advantage of these pathways individuals need additional technical, communication, and interpersonal skills. It helps to know green practices in building maintenance.

Resident or property managers often have trade or technical backgrounds while others may have studied architecture or engineering. There are very few specific degrees for property management—much must be learned on the job.

Sales and marketing jobs require both good people skills and good technical skills about sustainability. There are programs that combine both of these for people with a passion for green.

### For more information on careers in this industry:

- [http://gpro.org/](http://gpro.org/)
- [http://www.1000supers.com](http://www.1000supers.com)

### For information about the DOE CTE Programs:

- [http://schools.nyc.gov/ChoicesEnrollment/CTE/Parentsandstudents/default.htm](http://schools.nyc.gov/ChoicesEnrollment/CTE/Parentsandstudents/default.htm)
- [http://CTECouncil.org](http://CTECouncil.org)

### Where can I get additional general information on careers?

For careers in New York State: [www.careerzone.ny.gov](http://www.careerzone.ny.gov)
For general career information, including videos of nearly 550 careers: [www.acinet.org](http://www.acinet.org)
For general career information: [www.bls.gov/k12/](http://www.bls.gov/k12/)
## Increasing Levels of Education/Training Required

<table>
<thead>
<tr>
<th>High School Diploma/Equivalent and Training</th>
<th>Post-High School Certificate, Apprenticeship or Associate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weatherization Technician/Installer</strong></td>
<td><strong>Plumber</strong></td>
</tr>
<tr>
<td><strong>DUTIES:</strong></td>
<td><strong>DUTIES:</strong></td>
</tr>
<tr>
<td>Install insulation, doors and windows.</td>
<td>Assemble, install, change and repair pipelines or pipe</td>
</tr>
<tr>
<td>May caulk around windows and add sweeps</td>
<td>systems that carry water, steam, air or other liquids or</td>
</tr>
<tr>
<td>under doors.</td>
<td>gases. Green plumbers may install systems that harvest</td>
</tr>
<tr>
<td>May also make upgrades to heating and</td>
<td>rainwater to use in toilets and gardens or low-water or</td>
</tr>
<tr>
<td>cooling equipment.</td>
<td>dual-flush toilets. They also connect solar panels used</td>
</tr>
<tr>
<td>Requires basic carpentry skills and</td>
<td>to heat water and install water meters so people know</td>
</tr>
<tr>
<td>knowledge of principles of green</td>
<td>how much water they use.</td>
</tr>
<tr>
<td>construction.</td>
<td></td>
</tr>
<tr>
<td>Also requires attention to detail.</td>
<td></td>
</tr>
<tr>
<td><strong>PAY RANGE:</strong></td>
<td><strong>PAY RANGE:</strong></td>
</tr>
<tr>
<td>$26,000 to $53,000 per year</td>
<td>$37,000 to $84,000 per year</td>
</tr>
<tr>
<td><strong>Solar Panel Installer</strong></td>
<td><strong>Electrician</strong></td>
</tr>
<tr>
<td><strong>DUTIES:</strong></td>
<td><strong>DUTIES:</strong></td>
</tr>
<tr>
<td>Install solar panels on roofs.</td>
<td>Install, maintain, and repair electrical wiring and</td>
</tr>
<tr>
<td>May also measure, cut, assemble and</td>
<td>equipment. Make sure that work is done in accordance</td>
</tr>
<tr>
<td>bolt structural framing and solar</td>
<td>with codes. Green electricians connect solar panels used</td>
</tr>
<tr>
<td>modules.</td>
<td>for electricity, install electricity meters so that</td>
</tr>
<tr>
<td>Involves work outdoors in all types of</td>
<td>customers are more aware of their energy use, and it has</td>
</tr>
<tr>
<td>weather and at all temperatures.</td>
<td>install Energy Star appliances.</td>
</tr>
<tr>
<td><strong>PAY RANGE:</strong></td>
<td><strong>PAY RANGE:</strong></td>
</tr>
<tr>
<td>$36,000 to $44,000 per year</td>
<td>$49,000 to $100,000 per year</td>
</tr>
<tr>
<td><strong>Construction Laborer</strong></td>
<td>**Heating, Ventilation, Air Conditioning (HVAC) Mechanic/</td>
</tr>
<tr>
<td><strong>DUTIES:</strong></td>
<td>Installer**</td>
</tr>
<tr>
<td>Perform tasks involving physical labor at</td>
<td><strong>DUTIES:</strong></td>
</tr>
<tr>
<td>construction sites. May be responsible for</td>
<td>Install or repair heating, central air-conditioning or</td>
</tr>
<tr>
<td>recycling materials that are removed from</td>
<td>refrigeration systems. Heating systems include oil burners,</td>
</tr>
<tr>
<td>a construction site, such as cardboard,</td>
<td>hot-air furnaces and heating stoves. Green HVAC mechanics</td>
</tr>
<tr>
<td>metal, brick, concrete, plastic, glass,</td>
<td>may replace boilers or chillers with newer energy efficient</td>
</tr>
<tr>
<td>or tiles.</td>
<td>models.</td>
</tr>
<tr>
<td>May also perform basic tasks such as</td>
<td><strong>PAY RANGE:</strong></td>
</tr>
<tr>
<td>caulking and installing insulation to</td>
<td>$34,000 to $70,000 per year</td>
</tr>
<tr>
<td>reduce energy usage.</td>
<td><strong>Carpenter</strong></td>
</tr>
<tr>
<td><strong>PAY RANGE:</strong></td>
<td><strong>DUTIES:</strong></td>
</tr>
<tr>
<td>$30,000 to 74,000 per year</td>
<td>Construct, install or repair structures and fixtures made</td>
</tr>
<tr>
<td></td>
<td>of wood. May also install cabinets, siding, drywall and</td>
</tr>
<tr>
<td></td>
<td>insulation. Green carpenters have greater knowledge of green</td>
</tr>
<tr>
<td></td>
<td>building standards and principles. They use local and natural</td>
</tr>
<tr>
<td></td>
<td>wood, natural carpet fibers and non-toxic glue. They follow</td>
</tr>
<tr>
<td></td>
<td>proper recycling practices for construction materials. They</td>
</tr>
<tr>
<td></td>
<td>understand how green construction practices contribute to a</td>
</tr>
<tr>
<td></td>
<td>healthier indoor environment.</td>
</tr>
<tr>
<td><strong>PAY RANGE:</strong></td>
<td><strong>PAY RANGE:</strong></td>
</tr>
<tr>
<td>$22,000 to $37,000 per year</td>
<td>$34,000 to $70,000 per year</td>
</tr>
</tbody>
</table>

**Plumber Helper**

**DUTIES:**
Help plumber. May use, supply or hold materials or tools, and clean work area and equipment. Green plumber helpers must understand water conservation and ways to help people use water more efficiently.

**PAY RANGE:** $22,000 to $37,000 per year

**Carpenter**

**DUTIES:**
Construct, install or repair structures and fixtures made of wood. May also install cabinets, siding, drywall and insulation. Green carpenters have greater knowledge of green building standards and principles. They use local and natural wood, natural carpet fibers and non-toxic glue. They follow proper recycling practices for construction materials. They understand how green construction practices contribute to a healthier indoor environment.

**PAY RANGE:** $34,000 to $70,000 per year
### Bachelor's Degree

<table>
<thead>
<tr>
<th>Role</th>
<th>Duties</th>
<th>Pay Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Auditor/Home Energy Rater</td>
<td>Compile data on energy use, analyze energy usage and prepare reports on a building's or home's total energy profile. Inspect property to identify cost-effective, energy-saving measures and improvements. May work with energy modeling software to determine energy use patterns. The skills involved in an audit vary depending on a building's size and the complexities of its systems. Knowledge of construction and building operations is critical.</td>
<td>$72,000 to $87,000 per year</td>
</tr>
<tr>
<td>Cost Estimator</td>
<td>When a new building is being planned, estimate how much it will cost to build. These estimates help architects and owners keep the project within budget. In green construction, there are often added costs for energy-efficient windows or more efficient mechanical and plumbing systems. These added costs during construction may lead to energy savings in operating the building after it is built.</td>
<td>$52,000 to $101,000 per year</td>
</tr>
<tr>
<td>Construction Manager</td>
<td>Plan, direct or coordinate the construction of buildings and systems. Make sure the work is done the right way, whether it is new construction, renovation, weatherization or installation of solar panels. Green construction managers incorporate sustainability into the design phase of construction, and make sure the trades people who work on the project are trained on green construction requirements and practices.</td>
<td>$69,000 to $170,000 per year</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>Plan, design, and oversee construction projects and facilities, including buildings and systems for water supply and sewage treatment. Green civil engineers study the environmental impacts of engineering decisions, minimize environmental impacts and support sustainability goals.</td>
<td>$62,000 to $105,000 per year</td>
</tr>
<tr>
<td>Architect</td>
<td>Plan and design buildings, such as homes, offices, stores and factories. Green architects include elements of the environment that other people may not think of, such as a building's orientation to the sun. They work closely with other professionals, such as engineers and landscape architects.</td>
<td>$53,000 to $100,000 per year</td>
</tr>
</tbody>
</table>
Maintaining Green Buildings

Mapping Your Future: Building & Maintaining Green Buildings (page 6)

<table>
<thead>
<tr>
<th>High School Diploma/Equivalent</th>
<th>Post-High School Certificate, On-the-Job Training or Associate Degree</th>
<th>Bachelor’s Degree or Extensive Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janitors, Cleaners, and Porters</td>
<td>Handyperson</td>
<td>Building Superintendent</td>
</tr>
<tr>
<td>DUTIES: Keep buildings in clean and orderly condition. Use green cleaning products. May perform routine maintenance activities. Responsible for separating recyclables such as paper, newsprint, cardboard, glass, metal, and plastic according to NYC recycling law.</td>
<td>DUTIES: Fix leaky faucets, replace inefficient light bulbs, install low-flow faucets, and replace old parts. May also keep machines, equipment, and the structure of a building in good condition. These simple, cheap, and effective strategies make a building more energy-efficient.</td>
<td>DUTIES: Maintain a building’s good physical condition. Make sure machinery and building systems operate efficiently and smoothly. May supervise other staff in the building. A “Green Super” also knows about measuring energy usage, analyzing water-saving techniques, recycling, green cleaning, and energy-saving appliances. Also uses energy-efficient practices, related to heating, ventilation, air conditioning, and lighting.</td>
</tr>
<tr>
<td>PAY RANGE: $20,000 to $39,000 per year</td>
<td>PAY RANGE: $27,000 to $50,000 per year</td>
<td>PAY RANGE: $70,000 to $86,000 per year</td>
</tr>
<tr>
<td>Stationary Engineer/Boiler Operator (also called Operating Engineer in NYC)</td>
<td>Building Controls Systems Technician</td>
<td>Mechanical Engineer</td>
</tr>
<tr>
<td>DUTIES: Control and maintain equipment that is used to generate heat, air conditioning, and/or electricity in all types of buildings. Make sure that equipment is operating properly. May require knowledge of building automation systems, which are computerized networks designed to monitor and control a building’s mechanical and lighting systems to use less energy.</td>
<td>DUTIES: Inspect, maintain, repair, and replace building mechanical and electrical systems including building automation control systems. Requires understanding of building systems plus advanced skills in programming, networking, and systems integration. Building management systems are used to monitor and manage energy usage.</td>
<td>DUTIES: Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems. May be responsible for making sure that building systems are operating the way they are supposed to and in sync with one another, so that there are more energy savings and that other green standards are being met. Mechanical Engineering requires specialized education at the bachelor’s degree level.</td>
</tr>
<tr>
<td>PAY RANGE: $54,000 to $87,000 per year</td>
<td>PAY RANGE: $63,000 to $77,000 per year</td>
<td>PAY RANGE: $59,000 to $104,000 per year</td>
</tr>
</tbody>
</table>
Green Sales and Marketing

INCREASING LEVELS OF EDUCATION/TRAINING REQUIRED

Post-High School Certificate or Associate degree

Clean Tech Marketing Intern
DUTIES:
Assist with development of marketing strategies; design marketing campaign, research specific target markets in clean tech industry; write and edit blog posts.
PAY RANGE: $21,000 to $54,000 per year

Auditing, Sales, and Marketing Intern
DUTIES:
Reach out to small businesses in a targeted neighborhood to educate them on the many energy efficiency solutions and incentives available to them. Assist them with a free energy audit and connect them to appropriate agencies, contractors and/or vendors to facilitate implementation of energy efficiency upgrades.
PAY RANGE: $29,000 to $71,000 per year

Did you know?
• Green construction and maintenance are the wave of the future in New York City.
• All new city, state and school buildings and major renovations are being built green.
• This field is good for people who like to work with their hands.
• Some jobs combine technical knowledge with sales skills.
• Green skills development is being offered by the NYC Department of Education, unions, non-profit organizations, universities, community colleges and trade organizations.

Who should work in this field?
There are many types of jobs in this industry, and most involve hands-on work and the use of materials like wood, tools and machinery. People who enjoy this work like to work with their hands, and enjoy seeing the results of their work. In construction, a lot of the work is outdoors on building sites. In addition to good hands-on skills, it is also important to have good communication skills. Some of the jobs also require good sales skills in addition to technical skills.

Building and maintaining green buildings requires an understanding of both the principles of sustainability combined with trade-specific green construction knowledge.

Many jobs in this industry, in both construction and building maintenance, are unionized. People who work in unionized jobs generally earn more than people in the same job in a non-union environment.

MAP KEY

- Expected to grow faster than average between now and 2020.
- Licensing or certification required.
- Pay Range
  The pay range reflects typical pay from entry level to experienced. The higher pay takes many years to reach and development of significantly greater skills and knowledge.
  Jobs that are primarily part-time are expressed as hourly pay; jobs that are primarily full-time are shown with annual pay. Those that could be either are shown both ways.
- Education
  Minimum education and experience requirements. This may vary from employer to employer.

This flyer highlights jobs in the sector projected to have the same or more openings between now and 2020.
<table>
<thead>
<tr>
<th>Career</th>
<th>Skills necessary for this career</th>
<th>Characteristics necessary for this career</th>
<th>What education or training does this career require?</th>
<th>How might people in this career help “green” buildings?</th>
<th>Two questions I have about this career</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weatherization Technician/Installer</td>
<td></td>
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<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>Energy Auditor/ Home Energy Rater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>Stationary Engineer/ Boiler Operator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>Building Superintendent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.</td>
<td>2.</td>
</tr>
</tbody>
</table>
**Sentence Combining: Self-Care in Construction**

Students read and annotate an article about how workers in Construction careers can take care of themselves to avoid injury and illness. They consider how the physical demands of various Construction careers might influence career choice, brainstorm additional strategies for self-care important for all workers, and practice combining sentences from the article using coordinating conjunctions (FANBOYS) and dependent clauses.

**PREP**

- Read and be prepared to discuss the article, *Self-Care is the First Line of Defense in Construction Workers*
- Be prepared to explain vocabulary: overexertion, repetitive, savvy, degrade, stamina.
- Students should be already familiar with or teacher should be prepared to introduce sentence combining techniques including using coordinating conjunctions (FANBOYS) and dependent clauses. Coordinating conjunctions are often called FANBOYS. This is an acronym that stands for “for,” “and,” “nor,” “but,” “or,” “yet,” and “so.”

**MATERIALS**

- *Self-Care is the First Line of Defense in Construction Workers* article
- *Sentence Combining and Self-Care* handout

**EXPLAIN**

Construction is one of the most physically demanding and dangerous industries someone can work in. Based on what you’ve learned about Construction careers so far, why do you think so many people choose to pursue Construction careers in light of these facts?

- Good salaries and benefits, doesn’t require a lot of formal education (someone without a college degree can live a middle-class lifestyle), the satisfaction of building something, working outside, working on a team or for yourself.
Different Construction careers and trades have different physical demands. For example, a glazier (glass installer and repairer) might need to install heavy glass windows on the side of a skyscraper, while a plumber will need to be able to kneel or crouch for long periods of time while working on pipes and drains. **How might the physical demands of different Construction tasks influence someone’s career choice? What factors might someone need to consider when thinking about whether or not a job or trade matches their capacity and interests?**

- If someone cannot perform the physical requirements of a particular trade or job, they might consider a different specialty.
- Physical abilities; chronic injuries or illness; fear of heights; interest in performing specific kinds of difficult physical labor; such as kneeling, lifting, balancing; working indoors vs. outdoors (temperature and light).

Most Construction jobs involve some kind of physical demands or safety concerns. Workers need to make sure they are taking care of their physical and mental health so they can perform their jobs safely and effectively. Today we’re going to read about some of the ways Construction workers can practice self-care.

**Distribute Self-Care is the First Line of Defense in Construction Workers handout and ask students to read and annotate it. They should mark anything they find interesting, surprising, or confusing, circle unfamiliar vocabulary, and write any questions they have in the margins.**

**Divide students into groups of threes. Ask students to discuss what they just read together and answer the following questions:**

- What did you notice in the article? (write down as many things as you can)
- What did you read that interests you?
- What do you want to know more about?
- Was anything confusing? What do you have questions about? (be specific)

**Ask students to write down their group’s answers to be discussed afterward as a class.**
DISCUSSION GUIDELINES

Facilitate a discussion in which students share what they talked about in groups and also ultimately discuss:

Content

*For example:*
- What does the title mean and why is it important?
- According to the article, why do Construction workers need to stay healthy?
- According to the article, what are common causes of pain and injury to Construction workers?
- Why should Construction workers get 7 or 8 hours of sleep a night? Do you think this applies only to Construction workers? Explain.

Vocabulary

*For example:*
- What does “physical stamina” mean and why do Construction workers need it?
- In your own words, can you explain what PPE is?

Purpose

*For example:*
- Why did the author write this article? What is the purpose of this article?

Text features

*For example:*
- What are subtitles and why did the author use them?
- What do you see in the picture? What did you learn about the picture from the caption? Why did the author include this picture in particular? Does it help you understand the text better? Why or why not?

Making connections to personal experience

*For example:*
- Have you ever had to do a job that was physically demanding? Did you like doing the work? Why or why not?
- Are there any kinds of physical labor related to Construction you would not want to do? Explain.

The implications/takeaways

- How can these self-care tips for Construction workers be useful to you even if you are not interested in a career in Construction?
Students should back up their thinking with evidence from the article. Ask follow up questions that help students explain their thinking, delve more deeply into the questions, and cite evidence to support their responses. Some sample follow-up questions might include:

- How do you know that?
- Where in the article do you see that?
- Why do you think that?
- What else do you notice?
- Can you say more about that?
- What do you think that means?

EXPLAIN

7 Now we’re going to use the new information we learned about health and safety in Construction to practice sentence combining, a skill that is important in both the reading and the writing portions of the TASC exam.

8 Distribute Sentence Combining and Self-Care handout. Review sentence combining techniques if necessary, specifically, how to use coordinating conjunctions and dependent clauses.

9 Students can work independently or in pairs to complete the worksheet. When students are finished, review the worksheet as a class.
Self-Care is the First Line of Defense in Construction Workers


Construction is one of the most demanding occupations out there. It takes both physical and mental stamina to do the job at hand while also keeping oneself and one’s co-workers safe. In Construction, it’s important to stay physically and emotionally healthy so that no one gets hurt and the job can be completed correctly and on time. With that in mind, here are 4 tips to help toward that goal:

1. **Keep Fit**

For Construction workers, most days are a test of endurance, strength, and flexibility, which are all key components of the job. It is common for pain or injury to result from overexertion, repetitive movements, and/or working in awkward positions. Keeping fit can help prevent some injuries. An exercise plan that includes cardio, strength training, and flexibility exercises will help in all aspects of the job. You can even find workouts specifically designed for Construction workers online. Before beginning an exercise program, see your health care provider to determine your present fitness level and goals.
2. Get a Good Night’s Sleep

Sleep is crucial. Sleep helps repair tissues while you’re resting. It is also a key element to being alert during the day. The ability to focus is not only necessary to complete tasks, but co-workers depend on your observation and quick thinking to keep them safe as well! Try to get 7 to 8 hours of sleep per night.

3. Be PPE Savvy

PPE stands for Personal Protective Equipment. PPE includes items such as hard hats for head protection, safety goggles for eye protection, gloves for hand protection, and boots for foot protection. All PPE must meet certain standards and employers are required to provide PPE for all workers and require their use. Workers should maintain PPE to keep it in good working order and replace items as necessary. Even high-quality materials will not last forever. Items such as hard hats will degrade by exposure to sunlight and changes in temperature which decrease its ability to protect against impact. So check to be sure your PPE is up-to-date.

4. Eat Well

Food can directly impact how much physical stamina you have and how mentally alert you are during the work day. Eating whole grains, lean protein and vegetables while limiting sugars and alcohol can help you feel better and more alert. Foods such as blueberries, nuts, wild-caught salmon, green leafy vegetables and even dark chocolate are said to boost mental acuity. Drinking plenty of water also improves both endurance and focus.

Image © vectorfusionart / Bigstock
Sentence Combining and Self-Care

Work independently or with a partner to combine the following sentences from the article, “Self-Care is the First Line of Defense in Construction Workers.” According to each section, you will either use coordinating conjunctions/FANBOYS (“for,” “and,” “nor,” “but,” “or,” “yet,” and “so”) or dependent clauses (“because” or “although”) to combine the sentences.

REMEMBER: When you combine sentences, it is fine to change, rearrange, add or omit some words from the sentences, as long as the meaning of the sentence does not change.

Sentence Combining with FANBOYS

Combine these sentences from the article using “and”, “but” or “so.” The first set is done for you as an example.

1. It is common for pain or injury to result from overexertion, repetitive movements, and/or working in awkward positions. Keeping fit can help prevent some injuries.

   It is common for pain or injury to result from overexertion, repetitive movements, and/or working in awkward positions, but keeping fit can help prevent some injuries.

2. Sleep is crucial. Sleep helps repair tissues while you’re resting.

3. Workers should maintain PPE to keep it in good working order and replace items as necessary. Even high-quality materials will not last forever.

4. PPE stands for Personal Protective Equipment. PPE includes items such as hard hats for head protection, safety goggles for eye protection, gloves for hand protection, and boots for foot protection.
Sentence Combining Using Dependent Clauses

Now combine the same sentences using “although” or “because.” Set 1 is done for you as an example.

1. It is common for pain or injury to result from overexertion, repetitive movements, and/or working in awkward positions.
   Keeping fit can help prevent some injuries.

   Although it is common for pain or injury to result from overexertion, repetitive movements, and/or working in awkward positions, keeping fit can help prevent some injuries.

2. Sleep is crucial.
   Sleep helps repair tissues while you’re resting.

3. Workers should maintain PPE to keep it in good working order and replace items as necessary.
   Even high-quality materials will not last forever.

4. PPE stands for Personal Protective Equipment.
   PPE includes items such as hard hats for head protection, safety goggles for eye protection, gloves for hand protection, and boots for foot protection.
Reading Sample Help Wanted Ads in Construction*

Students read a selection of help wanted ads for Plumber’s Helper positions posted on the Indeed website. Some of the ads are very detailed; others are not. Students will ask questions about and make inferences from the ads to figure out what the job entails, and match a fictitious job applicant to the job ad that seems the best fit for them. The three ads are for the same career—Plumber’s Helper—so that students have grounds for comparison. They can be used to discuss the distinctions between help wanted ads in general.

PREP

• Read the Selected Job Ads for Plumber’s Helper*

MATERIALS

• Selected Job Ads for Plumber’s Helper*
• Job Ad Information Checklist handout*
• Paraphrasing and Inferring Help Wanted Ads handout*
• Job Applicant Profiles handout*

EXPLAIN

1. There are many ways that people in Construction find out about jobs. Often, they learn through word of mouth or are independent contractors who own their own businesses and get jobs through referrals or advertising. Sometimes people respond to open calls for new apprentices that are typically posted on the Department of Labor’s website. Other times, people looking for jobs in Construction respond to ads in the newspaper or on a job website. Imagine you’re looking through help wanted ads. What information is included in the ads? Write student responses on the board. Review this information as a class.

> Salary, Location, Start date, Responsibilities, Contact person
2. Put students into groups of three. Distribute the *Job Ad Information Checklist* and ask students to copy the list from the board into the left-hand column on the handout, and add any additional types of information they think should be included.

3. Distribute the *Selected Job Ads* handout and ask students to read the job ads from three Construction companies, and put a check on the handout in the box corresponding to the information included in the ad. For example, if the job ad for *E-Jay Plumbing & Heating Services* lists the start date, they will put a check in the corresponding box. If not, they will leave it blank.

4. Distribute the *Paraphrasing and Inferring Help Wanted Ads* handout and have students work on it in their group. They should paraphrase the duties required of the worker, and infer which characteristics the ideal candidate would have, based on the help wanted ad.

5. Students read applicant profiles and match the applicant to the job. Distribute the *Job Applicant Profiles* and ask the students to continue working in pairs to recommend a job for each applicant.

**DISCUSSION**

Ask students about their experience of reading the job ads:

- How are they different from one another?
- Were some more informative than others? How so?
- What information was missing from the less informative job ads?
- What questions should a job-seeker ask for the less informative ones?
- How can this information be applied to positions besides Plumber’s Helper?
### Job Ad Information Checklist*

In the left-hand column, write information you expect to find in a help wanted ad. Then read the sample ads and check which ads contain which pieces of information.

<table>
<thead>
<tr>
<th>JOB INFORMATION</th>
<th>E-Jay Plumbing and Heating*</th>
<th>Aqueduct Services Plumbing*</th>
<th>Darci Plumbing*</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
PLUMBER’S HELPER

E-JAY PLUMBING & HEATING SERVICES, INC.
Location: Yonkers, NY

Plumber’s Helper Wanted....

At E-Jay Plumbing & Heating Services, Inc. we don’t just make house calls, we use our experience and knowledge to solve complex plumbing problems. As a Plumber’s Helper, you will be working with residential/commercial customers and provide assistance to the Master Plumber by assisting in the layout, assembly, and installation of piping for air, gas, and water systems and fitting or assisting in fitting valves, couplings, or assemblies to tanks, pumps, or systems, using hand tools.

Requirements:

• Must have a MINIMUM of 2 years experience.
• MON–FRI 8 am–5 pm
• Plumbing tools preferred, but not required.
• Must have a clean driver’s license.
• Must be willing to submit to a drug test.
• Must have required work authorization to work in the United States.

We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, gender, age, national origin, veteran status, military status, disability, gender identity, sexual orientation, genetic information, or any other characteristic protected by law.

Job Type: Full-time
Experience: 2 years
Education: High school or equivalent
License: Driver’s
Language: English
PLUMBER'S HELPER

AQUEDUCT SERVICES PLUMBING
Valhalla, NY 10595

Job Type: Full-Time

Salary Range: Based upon experience, Overtime available

Job Description:

• Assist technicians while carrying out plumbing and heating work. Shuttle parts and supplies to technician when applicable and pick up parts, as needed.

• Wash and detail trucks and other vehicles, weekly, including company vehicles. Wax on a monthly basis if required.

• Assist in the organization and cleaning of the shop area and exterior grounds. Responsible for all grounds and building maintenance, including but not limited to emptying trash, cleaning shop bathrooms and other duties as assigned. Assist in maintaining overall cleanliness of the warehouse area.

• Assist in pulling and staging parts for service and sales as needed.

• Return rental cars, as needed.

• Assist with Shipping and Receiving.

• Work as a dedicated team member to ensure fast, flexible and expert service to every customer. Adhere to all company policies and procedures and perform miscellaneous duties as assigned.

Job Requirements:

• High school diploma or Equivalent

• 2-years’ experience working in a parts/warehouse environment

• Must possess and maintain a valid state driver’s license

• Willing to submit to random drug testing, per company policy

• Must be authorized to work in the US

• Mechanical aptitude preferred

Benefits: Medical, dental and vision insurance, prescription plan, 401K, disability insurance, competitive pay, advancement opportunities, educational and training opportunities, diverse workplace, safe and positive work environment, growing, reputable company
PLUMBER’S HELPER

DARCI PLUMBING CO. INC.,
Long Island City, NY 11101

Hiring motivated individuals to learn the plumbing industry. Will assist Master Plumbers in installing and repairing systems. Full time position with benefits.

• Must have valid driver’s license and able to drive vans and trucks. If you do not have an active, valid driver’s license please do not apply.

• No plumbing experience necessary but must be able to perform heavy labor and not be afraid to get dirty.

• Overtime a must, we are a 24/7 service company with on call crews.

Send your resume and we will contact you to schedule an interview.

Job Type: Full-time
Experience: 1 year in related work
License: Driver’s License
Paraphrasing and Inferring Help Wanted Ads*

Using the Help Wanted Ads, complete the chart below, paraphrasing the job responsibilities and inferring what characteristics would make an ideal worker for each position.

<table>
<thead>
<tr>
<th>Employer</th>
<th>Responsibilities</th>
<th>Ideal Candidate Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Jay Plumbing and Heating*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aqueduct Services Plumbing*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darci Plumbing*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Job Applicant Profiles***

**ROSIE** worked for an auto parts store for 4 years before it went out of business. In addition to selling, stocking and keeping an inventory of auto parts, and assisting customers in selecting the right part, Rosie also installed windshield wiper blades, changed batteries and tested alternators, batteries and starters. Rosie liked her job because she likes working with her hands and liked figuring out what was wrong with the cars that came in. She is very detail oriented. Rosie has a High School Equivalency Diploma. She has a daughter in middle school and lives with her mother, who can watch her daughter if needed. It is important to her to find a job where she can advance and earn more money. She has a driver’s license and can pass a drug test.

**ALI** is 23 years old. He dropped out of high school. He completed a plumbing course at an adult education program. He worked for one year as a furniture mover. As part of his job, he drove moving vans and trucks, loaded, unloaded and carried furniture to and from locations. He also worked for a year for a private carting company, removing garbage and recyclables from businesses. He is currently working part time as a livery cab driver but is looking for full-time work. Ali lives at home with his mother, father and younger brother. Ali is not sure if he wants to pursue a career in Construction, but he is looking for a job where he can make money and learn a skill.

**CYNTHIA** is 34 years old. She has a High School Equivalency Diploma and completed a job training program as a plumber’s helper and bought a set of plumber’s tools as part of that training. She is currently working as a plumber’s helper, a job she has held for four years. Cynthia is married with two children. She often works nights and weekends on her current job and wants a job with more regular hours so she can spend more time with her family. Before becoming a plumber’s assistant, she worked in building maintenance, and became interested in plumbing while taking care of the buildings where she worked. She is analytical and likes figuring out how to solve problems. She owns her own car and can travel to on-site calls if necessary.
Assessing Job Offers in Construction*

Students assess two job offers with different wages, work hours, commutes, and duties. They make various computations of the wages, take personal strengths and preferences into account, and write a response identifying which position they would choose and why.

MATERIALS

- Assessing Job Duties handout*
- Assessing Job Wages handout*
- My Job Acceptance writing assignment

EXPLAIN

1. After conducting an interview and checking references, an employer chooses an employee. But an employee also chooses. She can accept, reject, or negotiate.

   What factors will you consider when assessing a job offer?

   Examples: work responsibilities, wages, bonus/commissions, workplace, responsibilities, commute, time off, hours, benefits.

2. Distribute Assessing Job Duties. Ask students to work in pairs to identify as many job responsibilities for each job as possible.

3. Share responses with the class. Ask: What personal attributes or skills would make a good employee for each job?

4. Distribute Assessing Job Wages worksheet. Let students know that some questions have one clear answer and others have multiple possible answers. Ask students to read the handout and determine which type of answer each question will have. Ask students to complete the worksheet.

5. Ask students to discuss which job they would prefer, taking into account the job responsibilities, wages, schedule, commute and any other factors.

6. Distribute My Job Acceptance writing assignment and ask students to complete it. Teachers should divide this assignment into steps according to how they teach the writing process, for example, by using an outline, a freewrite or pair discussions.
Assessing Job Duties*

Great news! You’ve been offered a sales position selling Construction and Maintenance supplies for a Construction wholesale company and a Forklift Driver position at a building supply warehouse. For the Construction wholesale company, you sell the supplies to existing customers and find new customers. For the Forklift Driver job, you transport building supplies in the warehouse and monitor inventory. What duties do you think will be required for each position?

<table>
<thead>
<tr>
<th>JOB RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Wholesale Sales Representative</strong></td>
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<tr>
<td></td>
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<tr>
<td><strong>Construction Supply Warehouse Forklift Driver</strong></td>
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</table>
**Assessing Job Wages***

Analyze the chart below to answer the questions on the following page. Show all of your calculations.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Construction Wholesale Sales Representative</th>
<th>Construction Supply Warehouse Forklift Driver</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tuesday–Saturday 6:00am–2:00pm. Occasional evenings and weekends required.</td>
<td>Monday–Thursday 7:00am–4:00pm, Friday 7:00am–12:30pm, must be available to work overtime</td>
</tr>
<tr>
<td>Pay Rate</td>
<td>$25,000 base pay*</td>
<td>$16.00/hour*</td>
</tr>
<tr>
<td>Commission or Bonus</td>
<td>10% commission on every sale. Projected total earnings of $35-37,000 by the end of the first year.</td>
<td></td>
</tr>
<tr>
<td>Breaks</td>
<td>Breaks between sales calls</td>
<td>1 hour paid break</td>
</tr>
<tr>
<td>Commute</td>
<td>30 minutes by car* (must own a car); travel throughout territory in Brooklyn, NY</td>
<td>45 minute subway ride from home</td>
</tr>
<tr>
<td>Duties</td>
<td>Sell construction and maintenance products to existing customers. Find new customers by creating, following up, and maintaining new customer leads. Participate in trade shows, training seminars, and special sales activities.</td>
<td>• Efficiently operate forklift, load and unload trucks, pick and pack orders, load customer vehicles. Must be able to lift and move around 70lb merchandise. • Take inventory of merchandise. • Keep the warehouse and showroom clean and organized. • Perform additional functions that may be assigned at the discretion of management.</td>
</tr>
<tr>
<td><strong>Construction Wholesale Sales Representative</strong></td>
<td><strong>Construction Supply Warehouse Forklift Driver</strong></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Paid hours per week, excluding additional seasonal hours</td>
<td>Paid hours</td>
<td></td>
</tr>
<tr>
<td><strong>Weekly pay before commission</strong></td>
<td><strong>Weekly Pay</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Number of sales you think you can make per week</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Weekly earnings if you meet your selling target and the average sale is approx. $500.00.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weekly transportation costs</strong></td>
<td><strong>Weekly transportation costs</strong></td>
<td></td>
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</tbody>
</table>
My Job Acceptance

Taking into account all that you know about each job and all that you know about yourself, which job would you choose? Don’t forget about the overtime.

Write a 1-2 page letter to your friend or sibling, describing your choice and the reasoning behind it. Be sure to include:

- Expected responsibilities and why you think you would enjoy this job.
- Your skills and interests and how you can grow as a professional in this job.
- How this job fits in to your short-term or long-term goals.
- A discussion of the wages, including salary, base pay, commissions, year-end bonus and transportation costs.
- A discussion of the work hours and how this fits in with your schedule.
- Was it a difficult or easy choice? Explain why.

Make sure that each paragraph has one main idea and that all paragraphs are organized in a way that is easy to follow.
Starting Your Own Business Series*

In this series, students learn about starting about a business from a number of different angles. They perform calculations using statistics about small business employment in New York City. They read narratives from New Yorkers who have started their own businesses. And they practice using some of the online services available to New Yorkers hoping to open their own businesses.

ACTIVITIES IN THIS SERIES

6.1 • Calculating with Percents: Small Businesses in New York City*

6.2 • Small Business Narratives in Construction*

6.3 • The Nuts and Bolts of Launching a Business*
Calculating with Percents:
Small Businesses in New York City*

Students read a brief passage about small business employment in New York City, perform calculations using percents drawn from information in the passage, and interpret pie charts and bar graphs.

PREP
- This activity requires prior knowledge of calculating with percents.
- Complete all handouts for this activity to be used as answer keys.
- Be prepared to discuss the terms: self-employed, small business owner, owner-operator, entrepreneur.

MATeRIALS
- Prediction Guide: Types of Businesses in NYC handout, cut along the dotted lines
- Types of Businesses in NYC handout
- Pie Chart: New York City Businesses handout
- Bar Graph: Change in Number of NYC Businesses, 2001-2012
- Bill’s Report handout

EXPLAIN
1. When many people consider career choices, they think about getting hired by a company or organization, but working for oneself is an option too. What is a term for someone who works for themselves?
   - Self-employed, small business owner, owner-operator, entrepreneur.

2. Why would someone want to open their own business?
   - You are your own boss. You make all the decisions—set the hours, can choose your own clients and decide how big or small the business becomes.
   - Passion for a project! Some people start their own business out of a passion to serve a particular population by providing a specific service—sometimes one that might not yet exist, or is lacking in a particular area.
Some qualified workers who have had difficulty getting hired by employers for a variety of reasons, including their appearance, past experiences or other factors, can become very successful entrepreneurs. Sometimes the factors that deterred employers from hiring them make them especially appealing to clients, for example, women-owned construction companies or businesses owned by formerly incarcerated workers.

3 What might be especially challenging about owning your own business?

- Everything rests on you. In addition to becoming an expert in the service you provide, you also need to know a lot about and be good at running a business. You’re responsible for paying yourself and any employees, making sure people who sell you materials or services are paid on time, finding the best prices for materials and services you’ll need, finding clients, advertising, and more!

- For one-person businesses, if you are unable to work, for example due to illness, personal reasons or vacation, your business may be closed and may not generate revenue—or you may need to find a way to cover your absence or generate income while you are away.

- For businesses with more than one employee, you are responsible for hiring, training and terminations. You’re responsible for understanding labor laws and ethical practices—how much employees should be paid, what benefits they should receive, managing their schedules, preparing their tax forms and more.

4 Ask students to write down the names and/or services of businesses in their neighborhood that might be owned by entrepreneurs. Entrepreneurs may be the only employee of their business, or they may employ others. When students are finished writing the names of small businesses and business owners, ask them to share some of them with the class and write them on the board.

- Possible examples: bodegas, “Mom and Pop” pharmacies, hardware or other stores, laundromats, dog walkers, babysitters and nannies, handypersons, accountants, restaurant owners (restaurateurs) and caterers.

5 Distribute and ask students to complete the Prediction Guide: Types of Businesses in NYC. Don’t worry if you don’t know the answer—take a guess. By the end of the lesson you will learn the correct answers.
Once students are done, ask who thinks they have the highest percentage for the first question. Take notes on the board. Then ask if anyone has an answer that is higher. Continue until you have the highest guess for the first question. Then do the same to get to the lowest. Continue this for the remaining questions. You will return to this sheet at the end of the lesson.

Distribute *Types of Businesses in NYC*. Ask students to work individually to complete the handout. Once they are done, ask them to talk about the passage with a partner. Write the passage on the board and fill in the blanks one by one. If there is disagreement, ask students to discuss their answers until there is consensus.

The passage reads:

*New York City is a city of small businesses. Of the approximately 220,000 businesses located in the City, 98% are small (fewer than 100 employees) and 89% are very small (fewer than 20 employees). These businesses already employ nearly half of the City’s workforce and they are growing. Very small businesses were responsible for nearly a quarter of the new hires in the City between 2007 and 2012.*

Ask students to underline other numbers and/or measurements in the paragraph: Fewer than 100, 89%, nearly a quarter, etc.

Ask your students to consider this statement: “Of the approximately 220,000 businesses located in the City, 98% are small.” What does 98% mean? Can someone explain it without using the word “percent”? This is a way to get a sense of your students’ understanding of percents. Look for students to explain that almost all businesses in New York City are small. Hopefully, one of your students will say that 98 out of every 100 businesses are small. If no one says this, this is an opportunity to explain the meaning of *per cent* (“for every 100”). Then, see if anyone knows how to find out the number of small businesses in New York City.

\[ .98 \times 220,000 \]

Distribute *Pie Chart: New York City Businesses*. Ask students to work on it independently for five minutes before allowing them to work in groups of 2-3.

When students are finished, share the answer key you’ve prepared to review their responses. Ask who might use a graph like this.

Distribute *Bar Graph: Change in Number of NYC Businesses, 2001–2012*. Ask students to take a few minutes to try to understand what kind of information is in the graph. Give them a few more minutes to share with a partner. Bring the class together and ask the following questions:
In your own words, what do the numbers on the left side of the graph (vertical) mean?

- Groupings of businesses according to the number of employees they have.

In your own words, what do the numbers along the bottom of the graph represent?

- The percent change in the number of businesses in each category between 2001 and 2012.

I want to have a better understanding of how this works. What does this graph tell us about businesses of 10-19 employees?

- In 2012 there were 7% more businesses employing 10-19 people than there were in 2001.

Ask students to write the following statement underneath the graph:

- Write at least three true statements, based on the information in this graph.

Ask students to write their statements on their own. As they finish, ask them to share with a partner. Do they agree that all the statements are true? Then see if they can write a few more true statements together.

Write the following statement on the board:

- Between 2001 and 2012, businesses with the largest number of employees experienced the greatest growth.

Ask students to talk in groups of 2-3 and decide if the statement is true or false. Ask them to be prepared to explain their answer. If they think the statement is false, they should re-write it to make it true.

Take a vote and see how many students think the statement is true and how many think it is false. Have students on both sides explain their reasoning.

There are many ways to answer this question. Here is one possible response:
The statement is false. There was a 3% decrease in the number of businesses with 1000+ employees. The categories of businesses with the largest increases were businesses with 5-9 employees (a 15% increase) and businesses with 1-4 employees (a 11% increase).

After a few students have explained their thinking, take another vote. If many students still think it is true, explain why it is false.

Return to the Prediction Guide and ask students to correct their original answers based on their work in today’s lesson.

OPTIONAL ACTIVITY: Bill’s Report
Ask students to get into groups of 2-3 and discuss the handout. There are two levels of answers here:

- We know that the total number of businesses cannot be more than 220,000, but according to Bill’s graph there are 415,800 businesses in NYC. Also, a full pie chart represents 100%—here we have 189%. Also, since pie charts represent 100%, the 98% should be almost the whole thing, not about half.

- The root of Bill’s misunderstanding is that the very small businesses are a subset of small businesses. So the 89% is part of the 98%. A better version of the graph might just show small businesses (98%) vs. large businesses (2%). The graph in the previous pie chart handout would also work.
Prediction Guide: Types of Businesses in NYC

1. What percentage of businesses in NYC employ more than 100 people?
2. What percentage of businesses in NYC employ less than 100 people?
3. What percentage of businesses in NYC employ less than 20 people?
4. How many businesses are there in NYC?
Types of Businesses in NYC

Use each of the following to fill in the blanks in the passage below.

New York City is a city of small businesses. Of the approximately ____________ businesses located in the City, ________________ are small (fewer than 100 employees) and 89% are very small (_________________ employees). These businesses already employ ________________ of the City’s workforce and they are growing. Very small businesses were responsible for nearly a quarter of the new hires in the City between 2007 and ________________.

This passage was adapted from http://www1.nyc.gov/assets/smallbizfirst/downloads/pdf/small-business-first-report.pdf
New York City is a city of small businesses. Of the approximately 220,000 businesses located in the City, 98% are small (fewer than 100 employees) and 89% are very small (fewer than 20 employees). These businesses already employ nearly half of the City’s workforce and they are growing. Very small businesses were responsible for nearly a quarter of the new hires in the City between 2007 and 2012.
1. How many NYC businesses have fewer than 100 employees? Show your work.

2. How many NYC businesses have more than 100 employees? Show your work.

3. How many NYC businesses have fewer than 20 employees? Show your work.

4. Fill in missing information in the pie chart above.

5. Which title for this graph do you think is best? Write it above and be prepared to explain your choice.
   - A. Businesses in New York City
   - B. New York City Employment
   - C. Small Businesses Strengthen New York City’s Economy
Bar Graph: Change in Number of New York City Businesses, 2001-2012

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000+ Employees</td>
<td>3%</td>
</tr>
<tr>
<td>500-999 Employees</td>
<td>1%</td>
</tr>
<tr>
<td>250-499 Employees</td>
<td>0%</td>
</tr>
<tr>
<td>100-249 Employees</td>
<td>0%</td>
</tr>
<tr>
<td>50-99 Employees</td>
<td>6%</td>
</tr>
<tr>
<td>20-49 Employees</td>
<td>6%</td>
</tr>
<tr>
<td>10-19 Employees</td>
<td>7%</td>
</tr>
<tr>
<td>5-9 Employees</td>
<td>15%</td>
</tr>
<tr>
<td>1-4 Employees</td>
<td>11%</td>
</tr>
</tbody>
</table>

Percentage Change in Number of Establishments, 2001-2012

Source: U.S. Census Bureau, County Business Patterns

This chart is from http://www1.nyc.gov/assets/smallbizfirst/downloads/pdf/small-business-first-report.pdf
Bill’s Report

Bill works for the City of New York. His boss asked him to create a graph that showed the breakdown of the kinds of businesses in the city to show that it is important for New York City’s government to support small businesses. He checked over his work and didn’t see any mistakes, but he feels like there is something wrong. He brings it to you for help.

Types of New York Businesses

- very small businesses: 195,800 (98%)
- small businesses: 215,600 (98%)
- large businesses: 4,400 (2%)

What problems do you see in Bill’s graph?
Small Business Narratives in Construction*

Students read narratives about people who started their own Construction businesses, then consider the steps necessary to open those businesses.

**PREP**

- Write the following questions on the board:

  1. What services does the business sell?
  2. Why did the owner(s) start this business?
  3. What steps do you think the entrepreneur(s) took to open this business?

- Be prepared to explain vocabulary terms: entrepreneur, implements (n.), thesis, facilities

**MATERIALS**

- One Woman On What It’s Like to Run a Construction Company article
- How this Plumber Went into Business for Himself article
- Insights from a Self-Employed Handyman article

**EXPLAIN**

1. We’re going to read about people who have started their own Construction businesses and consider what it takes to open and maintain your own business. One word for someone who starts their own business is an entrepreneur.

   Do you know anyone who is an entrepreneur—someone in your family or a neighbor? Describe their business or what they do.

2. Divide the class into three groups and assign each group one of the articles to read. As they read, students should underline parts of the article that address questions #1 and #2 on the board.

3. When they are finished reading, students should discuss the article as a group and write answers to #1 and #2 on a piece of paper.
4 Ask each group to report their answers back to the class.

5 Ask groups to discuss the steps that they think are required to start this business and write the list of required steps to answer #3. Some of the steps are mentioned in some of the articles, and others will need to be identified by students’ close consideration of what it takes to start a business. **What are all the steps the business owner needed to take to bring their business from idea to opening day?**

   > There are dozens of steps a business owner needs to take to become a fully operating business, depending on the type of product or service being offered. Some of the steps for developing Construction businesses include: identify what kind of Construction services you want to offer; research the industry and competing companies; register with the NYC Department of Buildings*, get a Home Improvement Contractor License; finance your business; and lots more!

6 When groups are finished writing their lists, ask them to share with the class by sending a representative from each group to the board to write out their list of steps. When the lists are complete, discuss any similarities or differences between the lists.

7 In New York City*, there are over 6,000 rules that businesses have to comply with. (Not all 6,000 apply to the same business!) To make it easier for New Yorkers to start businesses, there are many free city services that help future business-owners know what they need to do to open up their business and remain a vendor in good standing with the city. There are free courses in how to file the proper legal documents, how to secure funding, even how to compete to have the City of New York as a customer for minority or women-owned businesses. There are even incubator and accelerator programs for Construction entrepreneurs, which are programs that rent affordable space and equipment to small business owners and help them connect to other kinds of resources, mentorship and support to get their businesses off the ground successfully. Construction incubators and accelerators are explored more in depth in the next activity. The Office of Small Business Services* offers courses in many small business topics. Some of these resources appear on the next page.
Assistance from the City of New York to Start a Business

New York City’s Office of Small Business Services offers free courses in all five boroughs to help New Yorkers open small businesses.


New York City has business services specifically designed to help immigrants open small businesses.


There are also resources customized for women starting their own businesses.

https://we.nyc/
One Woman on What It’s Like to Run a Construction Company

By Harling Ross

Meet Seyi Falade, the executive director at Cornerstone Barricades, a Maintenance of Traffic service provider specializing in road construction safety. The percentage of women who work in Construction is lower than 10 percent. I spoke with Seyi about how she navigates the industry.

On How She Got Into Construction
I don't have a background in Construction at all. My undergraduate degree was in Sports Management, so I worked in that field for about five years after graduating from college. In 2008, when the recession hit, I got laid off. I had the resources to pursue business school, so I decided to apply. I ended up going to Hult International Business School in London. I graduated, and then I returned to New York and was freelancing. I was in an interesting transition period for a while, doing some consulting work.

I was visiting my family’s home in Florida when everything changed. My dad was technically retired at the time (he was a civil engineer for the Florida Department of Transportation for over 22 years), but he'd recently started a small traffic maintenance business, I think just to keep busy and stay out of my mom’s hair. He had gotten to a point where he really felt confident in its potential, though, and wanted to invest more time and resources in it. My mom was sort of apprehensive, so she decided to ask for my opinion since I have an MBA. Once I started investigating the opportunity, I couldn’t stop thinking about it.

On Building a Company From Scratch and Learning Along the Way
I have to admit, in the very beginning, I was sort of intimidated by the construction plans because I simply couldn't read them. I like to feel competent and confident about my work, and for me, this was very new. But the more I learned about maintenance and traffic, specifically road construction, the more I started seeing it everywhere.

Any time you’re driving and come across a construction site, you’ll notice stuff like orange-and white-striped barricades and boards with flashing arrows. All of that equipment falls under this very niche field called “maintenance of traffic,” which is federally mandated but leased out by private companies. That’s what I ended up building my company around.

When we were first getting things off the ground and it was just my dad and me, I was really in the weeds. I was wearing a safety vest and boots and putting out equipment. I was waking up at 3 a.m. to go make sure the roads were closed on a construction site before traffic started coming in.
Eventually, I was able to pull away from doing that because we were able to bring on more employees. Now, I would describe my role as something similar to a chief operating officer. I’m doing everything from payroll and HR to business development and learning about contracts. I’m also responsible for managing our budget and our growth and tracking our revenue. The list goes on and on.

I feel like this company is my first child, so I want to make sure everything is running smoothly. Even though I’m no longer on the job site, I do get field reports and I drive down at least once a week to check up on things in person. The fact that I know the business from the ground up enables me to have informed conversations about the work we’re doing.

On Working With Her Dad
I really, really value the fact that I’m building something with my dad. I don’t take the amount of confidence and trust he has in me for granted. It’s a lot of responsibility when your parents give you their life savings and say, “invest it wisely.”

My father moved to the United States in the '70s. He came on scholarship from Nigeria. He ended up getting an Engineering degree. He married my mom; they raised their kids. They really embody the classic immigrant story of being really self-disciplined, putting their family first, sending money home, etc. I don’t know if I’m adequately expressing the weight of what it feels like for me, given that history, to invest the fruits of their hard work into something I’m building. When you invest in a business, you are basically writing checks nonstop. It’s a lot of pressure, but it’s also immensely satisfying to see it pay off.

Beyond that, I had some misgivings when I graduated from business school and saw the amount of debt I owed. I started to doubt the value of my degree. Having my parents express so much confidence in my level of education, and actually being able to put what I’ve learned to work as I’ve built this business, has really reinforced my decision to pursue a graduate degree.

This business has been my dad’s dream, and the joy of helping him fulfill it is something I can’t even measure. Last year, the business grew to a point where we had to purchase a truck. My dad had never purchased a brand new car of his own before. Handing him the keys and being like, “This is the direct result of something we’ve built together”—that was huge. •

VOCABULARY

**Apprehensive**: Hesitant, unsure  
**In the weeds**: Confused, lost, directionless  
**Misgivings**: Doubts, uncertainties  

**Niche field**: Specific, narrowly focused area of business. Many niche companies have loyal customers because there aren’t many businesses that provide the service.
As a plumber and draining industry professional who already had decades of experience under his belt, Trent Dawson wanted more. He was a third-generation licensed plumber whose family had owned Mechanical, Repair and Construction businesses for as long as he could remember. In fact, his great-grandfather had been a Master Plumber before phone numbers even existed. But Dawson wanted something beyond a comfortable living and a solid family legacy: He had always set his sights on owning his own business in the field. So, seven-and-a-half years ago, he bought a Mr. Rooter Plumbing franchise in Ohio, where he’s been growing his business and customer base ever since.

**Franchise owned:** Mr. Rooter Plumbing, in Mansfield, Ohio.

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**How long have you owned a franchise?**
I’ve been a Mr. Rooter Plumbing franchise owner for seven-and-a-half years.

**Can you explain what a franchise is?**
A franchise is one way that people can become small business owners. Franchising is a system for independently owned businesses to share a common brand, distribute products and services. It is a contract between the brand owner (franchisor) and an independent local business owner (franchisee). In exchange for paying to use the brand and business structure from the brand owner, the franchisee gets to start their own business, but with the advantage of using a well-known brand. So, even though I am part of the larger Mr. Rooter Plumbing family, I am the owner of my own Mr. Rooter franchise and have all the benefits of being self-employed.
Why franchise?
Franchised businesses provide owners with a really strong system to operate under, which was very appealing to me. The support from the corporate side was also a big draw. Starting your own business is always risky, but a strong franchise with guidelines and procedures helps set you up for success and opens the door to endless business opportunities.

What were you doing before you became a franchise owner?
I’ve been in the plumbing and drain cleaning industry for more than a decade. I actually worked for another national company as a service technician before franchising with Mr. Rooter Plumbing.

Why did you choose this particular franchise?
I’ve always wanted to be a business owner, and with my background in the plumbing industry, I knew I could put my expertise to good use by opening a Mr. Rooter Plumbing franchise in my area. Also, the company has such a great reputation and operates based on a set of values that are in line with my own. Good customer service is very important to me, and Mr. Rooter prides itself on just that. And, lucky for me, the territory was available for me to purchase!

How much would you estimate you spent before you were officially open for business?
We spent approximately $114,000 before officially opening for business, between the investment for our territory, our vans and exterior branding, tools, equipment and supplies.

Where did you get most of your advice/do most of your research?
I turned to friends and other local business owners for advice about running a successful business in this market. I also did a lot of research on the brand and found a lot of value in reading franchisee testimonials and other success stories.

What were the most unexpected challenges of opening your franchise?
In the beginning, I would definitely say that I underestimated the costs associated with starting up the business. It was a challenge to find funds to finance, and it became clear that availability for financing was limited.

What advice do you have for individuals who want to own their own franchise?
For someone looking to open their own franchise, I would tell them first and foremost to educate themselves on the industry they’re getting into. It’ll make the startup process much more seamless if they’re knowledgeable about the products and/or services they’re offering consumers—in addition to being well versed on the business and operations side. My other piece of advice is to be open-minded, patient, and strategic and surround yourself with good people who have your business’s best interest at heart.

What’s next for you and your business?
Right now, I’m staying focused on the big picture and overall growth of my business—seeking opportunities that will help us continue to flourish while maintaining the high-quality service my customers have come to expect from us.
Insights from a Self-Employed Handyman

by Dan Perry

Adapted from https://www.handymanstartup.com/california-handyman-interview/

How did you get started in the business?
My journey as a handyman started when I was a kid. I helped my father re-plumb our entire house. It just started from there and since then, I’ve been a city Electrician, a union Journeyman Carpenter, a high-end Furniture Designing business owner, and finally a Handyman business owner.

Why were you drawn to being in business for yourself as a handyman?
I just can’t do the same thing every day. This business provides me with the variety I need to stay happy. It’s the first business I’ve ever been happy in as well as the most lucrative of all my business ventures. My son works with me now, too, and that’s a lot of fun.

What kinds of services do you offer?
We do everything except for tile work. Every once in a while I’ll do that snap together flooring, but I stay away from tile. I’d just prefer doing smaller jobs like changing out a faucet. I tell my customers to call me for everything and if I can’t do it or don’t want to do the job, I’ll refer it to someone I know and trust. I make a lot of money from my electrical experience. I also make a lot from smaller jobs like changing out a garbage disposal.

Who is your ideal customer?
Older people. I like working for old people and homeowners. I hate doing commercial jobs. They take up all of your time and they won’t pay my rates, so I don’t deal with them. Costco wanted me to do some work earlier today and I turned them down.

What is your hourly rate?
I try to get between $75 and $100 per hour. But, I don’t tell my customers this because I always charge by the job. Even though customers are getting charged well over $100/hour in some cases, if you tell them this, it seems like a lot. So I tell them what the total cost will be for the entire job instead. But I also have a minimum charge of $75 which I make sure my customers clearly understand. This means that even if the job takes less than an hour, I’ll still make at least what I charge for one hour’s worth of work.
What are your top marketing methods?
Google, my van, and you can’t beat word of mouth. **Word of mouth** will always be the best form of advertising. I’m famous in town because of my vans. The logos are huge which is why I get so much business from them. I also stick to a small area so customers see my van all the time. My van really gets people’s attention and it’s easily read from a distance.

What do you think are the limitations of this business?
The one downside is that you have to do all the work yourself. It’s hard to find people that you can trust. I wouldn’t consider hiring anybody other than my son. That’s why I think franchises are misleading people. They sell you on the idea that you’ll be able to easily find retired handymen to do all the work for you. But, this just isn’t realistic.

What tips would you give to someone looking to start a fix-it business?
1. Always do excellent work and always answer your phone. Eventually, it takes on a life of its own. The number one mistake people in this business make is not answering their phone. The first person that answers the phone professionally will get 99% of the business.
2. Make sure to have the word “handyperson” in your business name.
3. It doesn’t take very many people to make you busy. Stick to a small area so you can eliminate driving all over a large city.
4. Tell your customers to call you for everything. If it falls outside of your scope of work, then you can refer somebody else to do the job.

**VOCABULARY**

**Journeyman:** Someone who has worked in the Construction trades for many years, starting as an apprentice and training under the guidance of experienced workers, then becoming an experienced worker themselves.

**Word of mouth:** Receiving information verbally, from one person to another.
The Nuts and Bolts of Launching a Business*

Students research the legal requirements of opening a business. They learn how to use the website of New York City’s Department of Small Business Services* to find the required steps to open a hypothetical business of their choice.

PREP

- Navigate to https://www1.nyc.gov/nycbusiness/wizard. Familiarize yourself with this site. Students will use it in this activity.
- Write the website above on the board.

MATERIALS

- This activity requires computer use.

EXPLAIN

1 Did you know that hair braiders are required to have a license to work? Many professions, particularly ones in which a worker has the potential to cause harm to the public, require licenses. Plumbing, nursing, food preparation and education are just a few of the dozens of professions that require professional licenses. These licenses are granted by the state and usually require a set number of training or education hours, a set number of supervised work hours, and the passing of a certifying exam.

Just as health inspectors inspect restaurants to make sure the food they provide is safe for customers to eat, other types of businesses are regulated as well. As entrepreneurs plan to open their businesses, one of their important tasks is to research and comply with legal requirements.

2 New York City has recognized that it is sometimes difficult for a new business owner to understand the legal requirements of starting a business. The Mayor’s Office recently created a way to simplify the process so that businesses can open quickly. After all, new businesses are good for the economy. People preparing to open a new business can take free courses through New York City’s Office of Small Business Services in everything from creating a business plan to applying for grants or finding investors to advertising. They can even enter contests to win start-up money. In addition, they can find out the legal requirements by taking a short survey online.
Today we are going to explore a website that helps New Yorkers figure out the steps required to open a business. Ask students to navigate to the URL on the board. Circulate to make sure all students are at this page before going to the next step.

Ask students to imagine a type of Construction business they would like to learn about opening, for example a carpentry business or a plumbing business. They will select Construction as the business type. They will then imagine certain details of their business, for example, if they have employees or if they will be working alone, if the business will operate projects that go on for longer than three months, and so on. After answering a few questions, they will receive a list of requirements for opening that type of business.

https://www1.nyc.gov/nycbusiness/wizard

NOTE
Click on **Start New Scenario**. You will be asked a series of questions about your imagined business. After answering the questions, you will receive a list of requirements for opening that type of business.

When students are finished, have them read about the requirements, then discuss the following questions as a class:

- How was your experience of finding requirements for your imagined business?
- What were some of the required steps on your list?
- What additional steps that are not on your list do you think you would have to take?
- Do you think you would like to become a small business owner at any point in the future? Why or why not?
A Panel of Construction Professionals

Having read narratives by Construction professionals, students now have the opportunity to interact directly with professionals. They develop questions for the panelists, listen to the presentation, ask their questions and take note of the answers.

COORDINATION

Having a career panel requires a lot of preparation, but it is very engaging and informative for students.

1 Identify professions of interest to students. You may want to create a career interest survey prior to the class.

2 Invite 5–6 panelists who work in fields of interest to students. These can include professionals and students. Students can offer some insight into the career preparation process, while professionals can discuss the reality of working in the field.

3 Where to find panelists:
   - Ask people you know—relatives, friends, neighbors.
   - Ask other teachers at your site for recommendations.
   - Ask student services personnel or professors at a local college. Some academic departments require that faculty complete a certain number of presentation or outreach hours per semester.
   - Ask at places of business with which you are familiar.
   - Ask students for recommendations.

4 What to ask for:
   - Explain that you teach basic education classes, or specify literacy, HSE or ESL, to adult students who are studying careers while they are working on their academic skills.
   - Explain that as part of the class you are creating a career panel, and that students are interested in hearing about their profession. Ask the panelists to be available for 1.5 hours (adjust this time as needed). Explain that you will ask them to briefly describe what they do and be available to answer questions from students.
   - Let your interest in your students come through. Talk about what impresses you about them. For example, they are parents who returned to school after their children have graduated, or people who come to school after working a night shift, or young people who do their homework while their friends are socializing.
Confirm, confirm, confirm

You can never confirm too many times. It’s terrible to have panelists not show up and be left with a thin panel. Confirm the date, time and location.

Prepare the panelists

The panelists might have never participated in a panel before. They might be nervous and unsure of what to discuss. Choose 4-5 from the topics below.

- Email the panelists a list of 4-5 topics you would like them to discuss. Use the ones listed below or create your own.
- Can you describe what you do on a daily basis at work?
- How did you get your job?
- What do you like about it?
- What is difficult about your job?
- What majors or certificates are required? Is licensing required?
- Is there a path to advancement? What are some higher level and lower level positions on this track?
- What personality traits are a good match for this career?
- What hours do you work?
- What benefits are typical in this profession?
- How do you think this profession is changing? What do you think it will be like in 3-5 years?

Let them know that the students will also generate their own questions for discussion.

TIPS FOR A SUCCESSFUL CAREER PANEL

A Mix of Formal and Informal Settings

A mix of formal and informal settings is ideal, for example, a moderated panel followed by lunch that the panelists are invited to. Maybe your site can order pizza, or you ask students and panelists to bring their lunch. This allows for more intimate conversations and networking. Another way is to simply have the panel take up a portion of class time, ask the panelists to stay during a break before the next part of the class begins, and ask students to take advantage of the panelists’ presence.

Be Flexible

It’s ideal if panelists can stay for the entire event, but if one needs to leave at a certain time, it may be better to have that panelist for some of the time than not at all.

Be gracious

Be gracious and tell the panelists the value of their participation. Also remember that this can be a rewarding experience for panelists. It’s inspiring to meet hard-working students and feel like you’ve contributed to their learning.
Preparing Students for a Career Panel

In order for the panel to be successful, students need to be prepared, so that they can engage with the panelists. They should be clear on what to expect from panelists and what will be expected of them.

EXPLAIN

1. You have read graphs and maps, watched video and read written interviews. Now it’s time to meet the professionals themselves. We’ve invited professionals here today so that you can learn about their experience in the workplace.

2. The professionals we have invited work as ________________________, ________________________, and ________________________. You will hear about their experiences in the workplace and will have the opportunity to ask them questions.

3. Write at least two questions—they shouldn’t be the same—for each panelist. What is it you really want to know about this career? Make sure the questions are complete and contain no spelling or grammatical mistakes. You may ask students to write different types of questions, for example, WH-questions.

4. If students have a difficult time thinking of questions, ask for one or two examples and write them on the board.
My Career Map

Having studied many aspects of careers, students will now draw their own career maps, based on their work histories.

MATERIALS

- My Career Map handout
- Paper and markers

INSTRUCTIONS FOR UPPER LEVELS

Give the following instructions, one at a time, making sure the class completes one step before giving instructions on the next.

1. Today you are going to map your career changes, and consider what you can learn from your work so far.

   Take out two pieces of paper. On one, list your jobs in order, starting with the earliest and moving to more recent jobs. Include jobs that you’ve held as well as ones that you interviewed for, but did not hold, either because they weren’t offered to you or because you couldn’t accept.

2. Next to each job, list anything you did to help you get or find out about the job, either one you accepted or one you didn’t. This could include research about the company or the job, talking to other employees, or preparing for the interview in other ways.

3. On the other piece of paper, draw a map, with a circle around each job you accepted, and a circle with a diagonal line through it for jobs you did not accept.

4. Between each job, write the step you took to secure or try to secure that job, and draw a box around the step, for example, seeking advice from someone who already worked in the field.

5. Draw dotted lines to show how you moved from one job to the next.
6. Draw a legend or key, explaining what the circles, boxes and dotted lines mean. Add any additional symbols that will make your map more informative and clear.

**KEY:**

- Step =
- Job =

**Lower Level Option:**

For a more scaffolded approach, use the worksheet on the following page.
## My Career Map

Tell the story of your work history by completing the chart below, from earliest to most recent.

<table>
<thead>
<tr>
<th>Job:</th>
<th>What Made Me Interested in this Job:</th>
<th>What I Did to Get the Job:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job:</td>
<td>What Made Me Interested in this Job:</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job:</td>
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<td>What I Did to Get the Job:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Career Map Writing Activity

Students practice writing skills by analyzing their Career Map. They explore jobs they’ve had in the past, why they made the choices they did, and goals they have for the future.

Note: Rather than focus on one writing strategy, this activity is designed to be flexible and invites teachers to use the activity as is (good for lower level students) or incorporate a focus on a specific writing skill of their choosing, such as topic sentences, paragraph structure, or transitional sentences.

PREP

- Review the writing assignment.
- **OPTIONAL**: Choose a writing strategy to incorporate into the activity. This could be a skill you have already introduced or are introducing for the first time. Some possible options include:

  - **Topic Sentences**: Use sentence starters/stems to help students focus on developing effective topic sentences for their paragraphs. For example:
    - According to the article,…
    - The article focused on…
    - The key issue discussed in the article…

  - **Paragraph Structure**: Use a Sandwich Paragraph (or other) graphic organizer to help students understand the different parts of a paragraph. See the following link or google “sandwich paragraph” for more guidance. https://missisparagraphpage.weebly.com/paragraph-sandwich.html
Transition phrases/sentences: Use transitional sentence stems/starters to help students understand strategies useful for transitioning between ideas. For example:

In addition,…
As a result,…
First,… Second,… Third,… Finally,…

MATERIALS

- Career Map Writing Activity worksheet

EXPLAIN

1 Tell students they are now going to write about their Career Map. They will need paper and pens or pencils.

2 Review any applicable writing skills you have decided to focus on, such as topic sentences, paragraph structure, transition sentences, etc. (See Prep section for examples)

3 Distribute Career Map Writing Activity worksheet. Have students read and explain the instructions and then give students time to write.
Career Map Writing Activity

Analyze your Career Map to complete the following writing activity. Each paragraph must answer all of the questions listed for each paragraph, but may also include as many more details as you would like to add. Each paragraph should have a topic sentence, details, and examples. Make sure your sentences flow with clear logic from one idea to the next and that your paragraphs address the topic completely.

PARAGRAPH 1:

Describe your Career Map. What does it look like? Is the path moving toward one specific goal? Does it move between jobs in different industries? Does it move between jobs in the same industry? Which industries does it include? Do you notice any similarities or differences between the steps you took to get new jobs? Are there any patterns that you notice? If you could sum up your map using only one word or phrase, what would it be? What did you learn from looking at your work experience laid out on paper?

PARAGRAPH 2:

Job 1: What was your first job? What steps did you take to get it? What did you like about it? What did you dislike about it? Why did you leave? What kind of job did you want next?

PARAGRAPH 3:

Job 2: What was it? What steps did you take to get it? What did you like about it? What did you dislike about it? Why did you leave? What kind of job did you want next?

PARAGRAPH 4:

Job 3: What was it? What steps did you take to get it? What did you like about it? What did you not like about it? Why did you leave? What kind of job did you want next?

PARAGRAPH 5:

Career goals: Given your career map history, your experiences and your interests, what kinds of jobs do you think you are well suited for? What kinds of jobs are you interested in learning more about? What do you know about yourself and your career goals now?
Nothing ever comes to one, that is worth having, except as a result of hard work.

– Booker T. Washington