Career & Technical Education

S.T.E.M.

Career Pathways

4th Grade Activity Book

.

.

.

About Career Pathways Activity Book

What do you want to be when you grow up? Children are asked this question often throughout their years in school. Many children will say a doctor, a lawyer, a teacher, a firefighter, while others will say "I don't know". Regardless of the answer, children start exploring careers as early as elementary school. As children start to take more classes, mature, and move through middle and high school, they become more aware of their individual interest. From there, they start to think about career possibilities and what they WILL be now that they are more grown up.

With this in mind, the Career & Technical Education Department of Savannah-Chatham County Public School System developed this activity book to bring awareness to the career preparation and career pathways available to children within this school system. The activities in this book are designed to be challenging and fun. This book will also enhance basic academic skills while raising awareness about work skills and career options.

Parents, Teachers, and Counselors are encouraged to use this activity book with children to explore career options. Parents, Teachers, and Counselors may visit: <u>www.sccpss.com</u> to obtain more information about Career Pathways and Career & Technical Education in Savannah, GA.

HB 713 mandates a comprehensive K-12 career development process. To support schools in fulfilling these requirements, the grade specific career awareness activities listed as an indicators on the College and Career Ready Performance Index (CCRPI), have been developed to assist students with career awareness.

The Georgia Department of Education has developed seventeen (17) elementary career awareness activities for local school systems to use as a guide to assist with the implementation of the College and Career Readiness Performance Indicators appropriate for the career awareness and career development indices. As an additional resource, The Georgia Department of Education has created an *Elementary Tracking Form* for HB 713 to assist local school systems in tracking completed and uncompleted career activities for transferring students. The form will provide accountability documentation for students as they move from one school or school system to another. It also provides a method for the career cluster activities facilitator to have a record of the activities that need to be completed by the student in a timely manner.

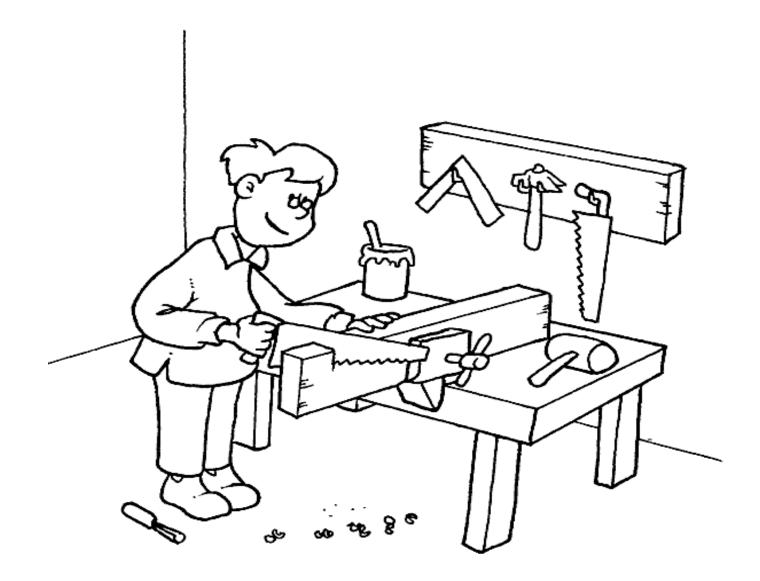
It is recommended that a designated person keep a record of completed activities as documentation, so that when a student transfers to a new school, the completed and uncompleted activities can be tracked and listed and the tracking form will follow the student to the new school. The tracking form helps with a consistency of record keeping for the local school systems as local schools need to maintain rolls per grade level of those students who have participated in career awareness activities.

This process will help ensure the legislative mandate of HB 713 is being met to enable students to graduate with a vision that will lead them successfully into the career planning process. Please remember that appropriate documentation should be maintained as a reporting requirement of the College and Career Ready Performance Index.

The elementary grade level activities can be accessed by clicking on the following link: http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Elementary-Cluster-Activities.aspx

Elementary School Guidance for Career Cluster Activities Tracking Form May, 2013		
Student Name: (Please Print)	Grade Level	
Name of Current Enrolled School	System	
Name of Receiving School	System	
Name of School Official Completing Form: (Please Print)		
Title		
Signature		
Phone Number		
Email address		
Instructions: Please check the appropriate box for completed and not completed career activities		
Grade 1 Activities Complete	d	
() Agriculture, Foods, & Natural Resources		
() Law, Public Safety, Corrections & Security		
() Transportation, Distribution & Logistics		
Grade 2 Activities Completed		
() Arts, AV/Technology, & Communications		
() Education & Training		
() Health Science		
() Health Science		
Grade 3 Activities Complete	h	
Grade 3 Activities Complete	d	
() Energy	d	
() Energy() Hospitality & Tourism	d	
 () Energy () Hospitality & Tourism () Human Services 		
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete		
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction 		
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration 		
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing 		
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing () Science, Technology, Engineering, & Mathematics (STEM) 	d	
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing () Science, Technology, Engineering, & Mathematics (STEM) Grade 5 Activities Complete 	d	
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing () Science, Technology, Engineering, & Mathematics (STEM) Grade 5 Activities Complete () Finance 	d	
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing () Science, Technology, Engineering, & Mathematics (STEM) Grade 5 Activities Complete () Finance () Government & Public Administration 	d	
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing () Science, Technology, Engineering, & Mathematics (STEM) Grade 5 Activities Complete () Finance () Government & Public Administration () Information Technology 	d	
 () Energy () Hospitality & Tourism () Human Services Grade 4 Activities Complete () Architecture & Construction () Business Management & Administration () Manufacturing () Science, Technology, Engineering, & Mathematics (STEM) Grade 5 Activities Complete () Finance () Government & Public Administration 	d	

For questions, please contact Dr. Myrel Seigler, Program Manager for School Counselors, at mseigler@doe.k12.ga.us or 404-657-8324.



www.coloring-pages-kids.com

Carpenter Builds or repair structures and fixtures made of wood, such as concrete forms; building frameworks, Program Area: Architecture & Construction Suggested CTE Pathways: Construction Schools: Woodville Tompkins Technical & Career High School Annex Career Technical Student Organizations: SkillsUSA Potential College Majors: Construction Other Careers: Painter, Roofer, Brick mason, Contractor, Home builder Salary range: \$24,650- \$71,660 per year

Doghouse

What you learn today will help you tomorrow!

Reading and math are important skills to have. Architects and construction workers need to be able to plan, read and follow directions. They also need to know how to make estimates on how much material they will need and how much it will cost.



Materials Needed	<u>Unit</u> Price	Total Cost
 2 sheets plywood 1 box roofing shingles 1 box roofing nails 1 box small nails 2 8 foot boards 	\$9.95 each \$12.45 \$1.89 \$1.49 \$.89 each TOTAL	

- 1. What is the total cost of materials to build the doghouse?
- 2. Rounding to the nearest 50 cents, what is the estimated cost of materials to build the doghouse?
- 3. What school subjects would help you build a doghouse? Why?

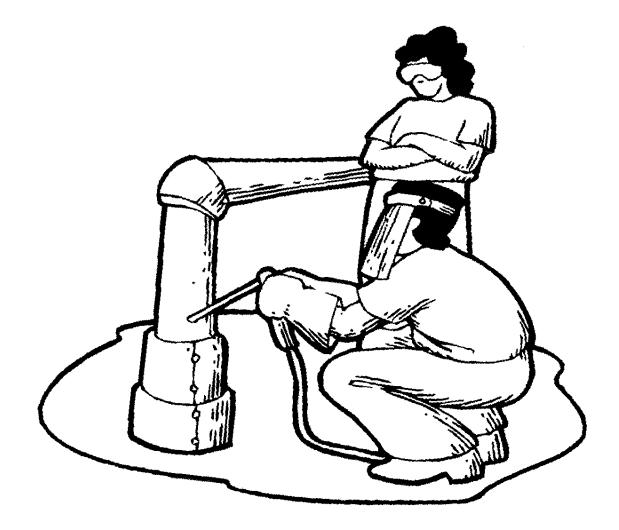
For A Challenge

4. If there was a 15% increase in prices, how much would each material cost? What would the new total be?



Adapted from Elementary Career Awareness Guide by North Carolina SOICC

WELDING





Administrative Assistant

Provide administrative support by conducting research, preparing reports, handling information requests, and performing clerical functions such as preparing letters, receiving visitors, arranging conference calls, and scheduling meetings.

Program Area: Business & Computer Science

Suggested CTE Pathways: Administrative/Information Support,

Schools: Beach High School, Groves High School, Jenkins High School, Johnson High School, Islands High School, Savannah High School, New Hampstead High School

Career Technical Student Organizations: Future Business Leaders of America (FBLA)

Potential College Majors: Business Administration, Information Systems, Administrative Support, Entrepreneurship

Other Careers: Office Clerk, Office Manager, Chief Executive Officer, Business Owner

Salary range: \$28,740- \$67,000 per year (salaries higher for management careers)

Career Start 3

Fall 2003

Read about each career then answer the questions.



My name is Lisa. I am an electronics engineer. I fix radios, televisions, computers and telephones. I design electrical equipment and do research. I also write and use computer programs to make new equipment. Answer the questions below, 1. Which person would work at a hospital?_____

2. Which person would you call if you wanted to build a new house?

3. Which job would use wires and circuits?

4. What two jobs describe using computers?



Lam Jack. Lam a professional surveyor. I measure the earth's surface. I work on roads and construction sites. I also collect information for maps and charts. When people want to build a new home, they call me to measure the land boundaries before they build.



My name is Mark . I work as a clinical laboratory technician. I perform tests used in the diagnosis and treatment of disease. I work in a lab performing the tests and enter the information into a computer. Some of the things I do include: drug testing, matching blood types, and checking for different types of bacteria. I use microscopes and other lab equipment to do my job.

Career Start 3

www.vaview.vt.edu



www.coloringpages101.com

Entrepreneur

Provide overall direction of the business they own. Plan, direct, or coordinate operational activities at the highest level of management with the help of employees.

Program Area: Business & Computer Science/ Marketing

Suggested CTE Pathways: Small Business Development, Marketing Management*

Schools: Beach High School*, Groves High School, Jenkins High School, Johnson High School*, Savannah High School

Career Technical Student Organizations: Future Business Leaders of America (FBLA), Distributive Education Clubs of America (DECA)

Potential College Majors: Business Administration, Management, Marketing, Finance (plus any other area of interest)

Other Careers: Product Developer, Promoter, Business Manager, Chief Executive Officer, Business Owner

Salary range: \$75,160- \$165,080+ per year

CHOOSE AN OCCUPATION

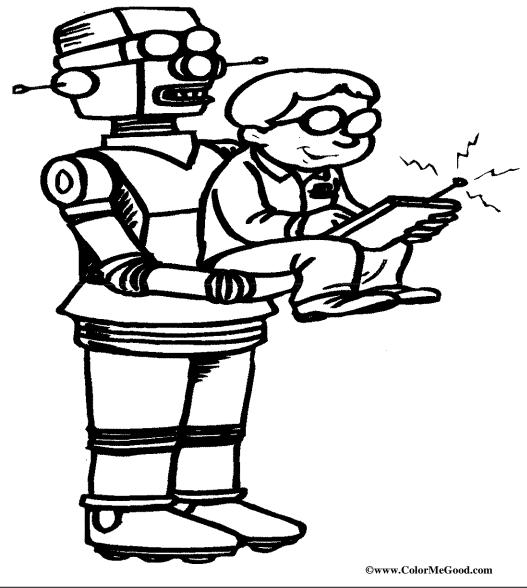
- 1. Choose an occupation and write it here: _____
- 2. What kind of skills do you think a person would need for this occupation?

3. What kind of tools do you think this person would use ?

4. What do you think a typical day on the job might be like for this person?

5. How is this person's day on the job similar to your day at school?

6. What kind of education do you think a person would need for this occupation?



Robotics Engineer

Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment.

Program Area: STEM or Manufacturing

Suggested CTE Pathways: Engineering & Technology; Manufacturing

Schools: Jenkins High School and Woodville Tompkins Technical and Career High School

Career Technical Student Organizations: Technology Student Association (TSA)

Potential College Majors: Technology, Engineering, Architecture, Manufacturing, Physics,

Other Careers: Roller Coaster Engineer, Automotive Engineer, Electrical Engineer, Computer Engineer

Architect Salary range: \$50,550- \$119,480 per year

Math Counts! Each job below uses math. **Construction Worker** Help each person solve the problems below. For each total the cashier 1. Tuesday the construction worker used 6 rows of 5 beams. 6 x 5= was given \$5.00. What is 2. Wednesday she used 9 rows of 8 the change for each? beams. ____ x ____= 1. \$4.25 3. Thursday she used 7 rows of 5 2. \$3.00 3. \$1.25 beams. x = Cashier 4. Friday she used 4 rows of 8 4. \$.50 beams. x = 5. \$2.43 6. \$3.33 How many beams were used in all? Where would a cashier work? What does a construction worker build? Write the correct fraction for each item Put the correct sign for the below. The baker sold the following : number of cds made on each line. 565 898 two thirds of the muffins: 1000 100 7600 865 9999 six eighths of the cakes: 1000 500 5000 one half of the pies: 3699 456 Software 878 100 + 778three fifths of the cookies: Engineer What does a software designer create? four tenths of the bread: Bakei # of rocks Name collected Answer the questions below Complete each number sentence. Gneiss using the graph. 12 The mover unloaded the following: Granite 19 3 + 5 = 8 and $8 - ___ = 5$ boxes What is the total number of Limestone 27 rocks for sandstone and 6 + 9 = 17 and 17 - ____ = 6 beds Basalt 14 granite? Sandstone 8 14-7 = 7 and 7 + ____ = 14 tables How many rocks were found Slate 6 that were limestone? (21 + 9 + 30) and (30 - 9) =_____ chairs What is the total number of Who does a mover help? rocks for gneiss and basalt? Mover

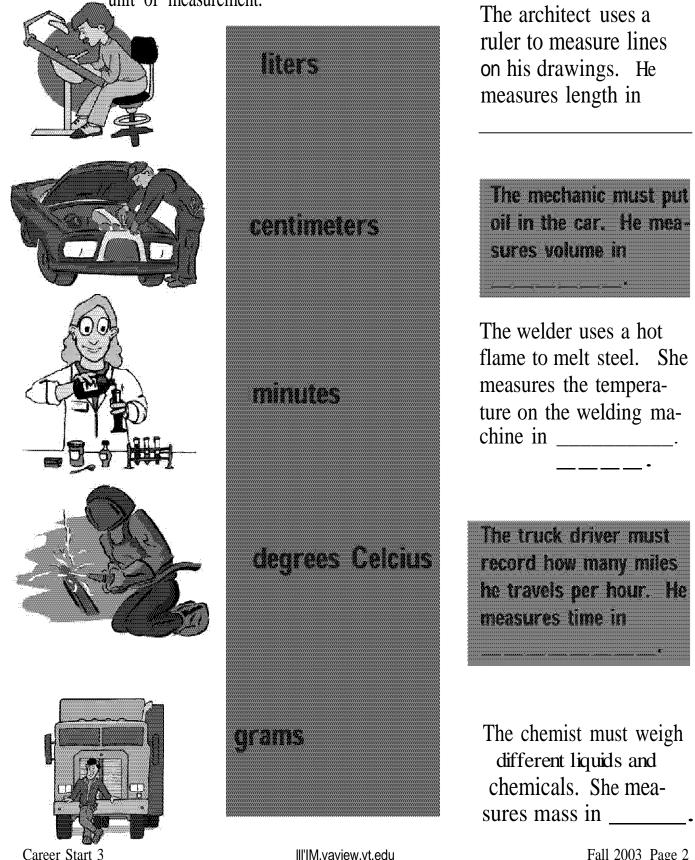
Career Start 3

www.vaview.vt.edu

Fall 2003 Page 3

Geologist

Science Matters: Each job below uses a type of measurement. Match the occupation to the correct description and the correct unit of measurement.



Fall 2003 Page 2

III'IM.vaview.vt.edu

Georgia Department of Education Career Portfolio Guidance

Resources

<u>GACollege411 (N/A) www.gacollege411.org</u> This is the primary source of information to complete the career research

Career Cruising Website (1300L)

You will need a username and password to log in. However, career research can also be done on GACollege411 website

Top 10 Careers Needed for the Future (1430L)

http://www.ehow.com/list_5481635_10-needed-jobs-future.html#page=0 A current list of "hot" careers

<u>25 Rewarding Careers (1100L) http://money.usnews.com/careers/best-jobs/rankings/the-25-best-jobs</u>

This list from US News may surprise students. US News has selected careers with good growth potential, worker satisfaction, and social status. Each career is linked to a brief overview that will help students begin their research. If you use this resource, print copies of the articles about specific careers, but **do not** include the blog responses from readers

The Best Job for You

U.S. News & World Report (3/19/2007)-Nemko, Marty

http://www.usnews.com/usnews/biztech/articles/070311/19intro.htm

This article introduces a section which describes career choice as the Internet becomes ubiquitous, and Americans seek richer, simpler lives. Among the careers that this section discusses are librarians, still needed in the digital age, website developers, management consultants and bi-lingual translators. Optometry is mentioned as it offers a career in medicine with a fairly predictable work schedule

Georgia Department of Labor

<u>www.dol.state.ga.us/</u> this website provides students with specific Georgia labor market information

Special Thanks to

Richmond Public Schools- Richmond, VA Dr. Deborah Jewell-Sherman, Superintendent Dr. Yvonne Brandon, Deputy Superintendent/CTE Director

> Mark Hughes, Director Labor Market and Career Information Texas Workforce Commission

> > U.S. Department of Labor Bureau of Labor Statistics

> > > Monster.com

For permission to edit & reprint this publication for the benefit of educating "All" Children



101 Priscilla D. Thomas Way

Garden City, GA 31408

Office: 912-395-6765 Fax: 912-201-7583

Our Mission To ignite a passion for learning and teaching at high levels.

Our Vision From school to the world: All students prepared for productive futures.

Dr. Thomas B. Lockamy, Jr. Superintendent of Schools

Dr. Ann Levett Interim Chief Academic Officer

> Dr. Angie Lewis CTAE Director

Bettina Polite Tate CTAE Supervisor

Audrey Fuller Youth Apprenticeship Coordinator/CTAE Supervisor

> Judy Johnson CTAE Senior Clerk

School Board

Dr. Joe Buck, President Julie M. Wade, District 1 Dr. Dionne Hoskins, District 2 Cornelia H. Hall, District 3 Shawn A. Kachmar, District 4 Irene G. Hines, District 5 Larry Lower, District 6 Jennifer B. Lambeth, District 7 Ruby D. Jones, District 8 (Vice-President)



208 Bull Street, Savannah, GA 31401 Phone: 912-395-5600