



Manufacturing Career Connections Ohio

Nocti
Business Solutions
A Corporate Assessment Provider

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Company Background

- Two Companies

- NOCTI

- 501c3 Advocating for Career and Technical Education (CTE)
- Supplier of end-of-program credentials for all CTE Programs

- Nocti Business Solutions (NBS)

- Works with Business and Industry
- Supplier of off-the-shelf assessments for pre-employment, training, or promotion within a company or organization
- Developer of customized assessment solutions for companies and organizations

Ties to Industry



Certification Partners



Nocti
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A Corporate Assessment Provider

Industry Resource Centers (IRCs)

- Community Colleges (and other organizations) around the country
- Utilize all three of our assessment batteries
- Serve as a testing partner for business and industry in their communities

<https://www.noctibusiness.com/contact-us/testing-locations/>

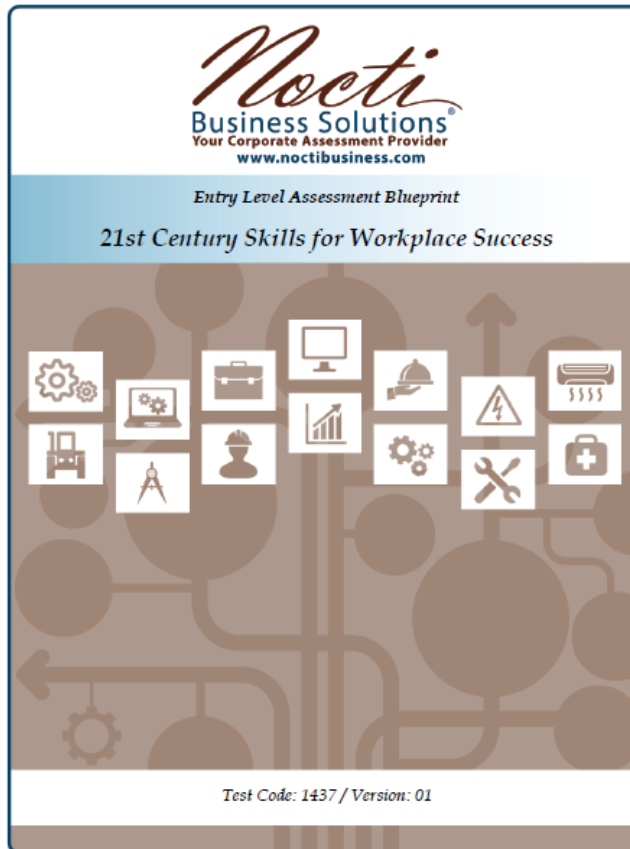
Offerings

- **Three Batteries of Standardized Assessments**
 - Over 100 occupational areas
 - Employability Skills assessments
 - Performance (hands-on) assessment
- **Customized Assessment Services**
 - Job and Task Analysis
 - Item bank of over 100,000 items
 - Validation and reliability services
 - Cut score determination
 - Customized reporting services
- **QuadNet™ System**
 - Secure, robust online-testing platform
 - Scoring and reporting services
 - Online data storage
 - Remote proctoring options

Standardized Assessments

- **Three Batteries of Standardized Assessments**
 - [Entry Level](#)
 - [Experienced Worker](#)
 - [Advanced Skill](#)

Employability Skills Assessments



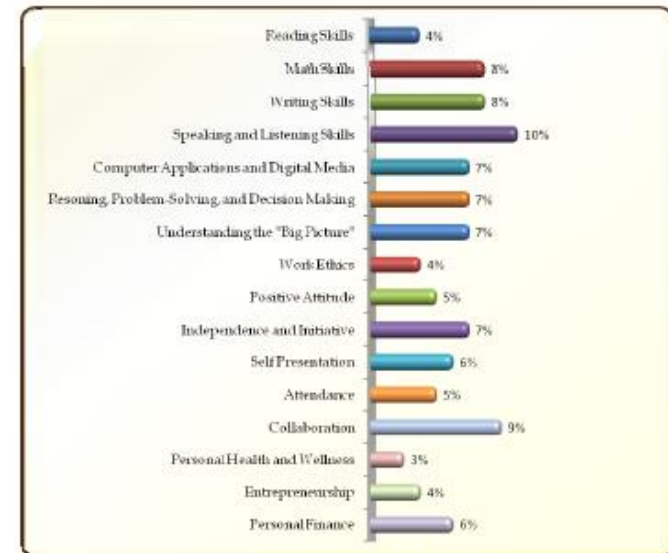
21st Century Skills for Workplace Success Blueprint

Written Assessment:

Administration Time: 3 hours

Number of Questions: 144

Areas Covered:



Performance Assessments

- Performance booklets and evaluators guides shipped to site
- *List of Materials, Tools, and Supplies* included in evaluator guide
- Evaluation sheet included in each performance booklet
- Performance instructions included in performance booklets and evaluator guide
- Specific evaluator instructions, list of criteria, and scoring rubric included in evaluator guide
- Ship answer sheets to us or enter performance ratings online

List of Materials, Tools, and Equipment Required

JOB 1 – TEST A COOLING SYSTEM

- Appropriate Personal Protective Equipment (PPE)
- Complete engine cooling system
- Cooling system pressure tester
- Service manual
- Writing utensils
- Drop light (flashlight)
- Shop towels

JOB 2 – ELECTRICAL TESTING

- Appropriate Personal Protective Equipment (PPE)
- Vehicle in operating condition, with properly operating electrical system
- Shop towels
- Battery tester manual
- Battery load tester
- Service manual
- Writing utensils
- Drop light (flashlight)

JOB 3 – ADJUST VALVE CLEARANCE

- Appropriate Personal Protective Equipment (PPE)
- Shop towels
- Feeler gauge
- Wrenches
- Screwdriver
- Torque wrench and screwdriver adapter
- Socket and breaker bar to turn engine
- Service manual
- Writing utensils

HEAVY EQUIPMENT MAINTENANCE AND REPAIR PERFORMANCE EVALUATION WORKSHEET

Participant Name: _____ Site Code: _____

Participant ID: _____ Date: _____

Evaluator Instructions: Use this worksheet to assist with the rating process; the criteria are located in the evaluator guide. Once this form has been completed, transfer ratings to the answer sheet or online system.

Job	Criteria	Item No.	A	B	C	D	E
Job 1	Test Cooling System						
1	Cap pressure test	1					
2	System pressure loss	2					
3	Leak in system	3					
4	Time to complete Job 1	4					
Job 2	Electrical Testing						
5	Binary discharge test	5					
6	Starter draw test	6					
7	Alternator maximum output test	7					
8	Time to complete Job 2	8					
Job 3	Adjust Valve Clearance						
9	Accuracy of specifications	9					
10	Accuracy of positioning engine for valve adjustment	10					
11	Accuracy of feeler measurement for valve clearance	11					
12	Accuracy of final measurement for valve clearance	12					
13	Time to complete Job 3	13					
Job 4	Set Carrier Ring and Piston Backlash						
14	Set carrier ring and piston backlash	14					
15	Measure and record backlash	15					
16	Time to complete Job 4	16					
Job 5	Identify Brake Components						
17	Identify brake components	17					
18	Time to complete Job 5	18					
Job 6	Measure and Adjust Track						
19	Lock-out tag-out	19					
20	Factor specification	20					
21	Measure and record track measurement	21					
22	Circle correction action needed	22					
23	Adjust track and record adjusted measurement	23					
24	Remove lock-out tag-out	24					
25	Time to complete Job 6	25					

JOB 1 – TEST COOLING SYSTEM

JOB 1 = 10% of test

- Cap pressure test** 10 points possible
 A = Participant met both checklist criteria
 C = Participant met 1 checklist criteria
 E = Participant did not meet either checklist criteria, or did not complete

Checklist Criteria
Pressurized cap correctly
Pressure test recorded
 - System pressure loss** 10 points possible
 A = Participant met both checklist criteria
 C = Participant met 1 checklist criteria
 E = Participant did not meet either checklist criteria, or did not complete

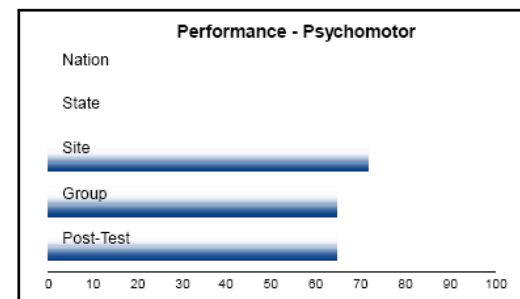
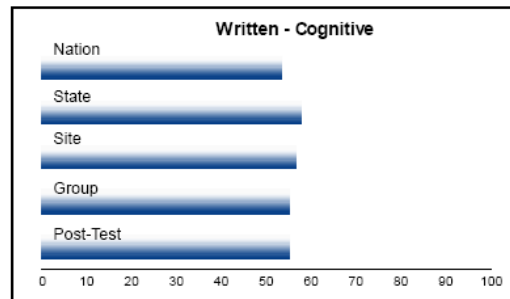
Checklist Criteria
Cooling system pressurized
System pressure loss recorded
 - Leaks in system** 10 points possible
 A = Participant met both checklist criteria
 C = Participant met 1 checklist criteria
 E = Participant did not meet either checklist criteria, or did not complete

Checklist Criteria
System leaks recorded
Location(s) recorded
- (NOTE: If no leaks were found and recorded appropriately, participant should receive an A)
- Time to complete Job 1** 5 points possible
 A = Job 1 was completed within 15 minutes
 E = Job 1 was not completed within 15 minutes

END OF JOB 1

Individual Score Report

Industrial Maintenance Mechanics - 2074 v1						
Written - Cognitive						
Duty #	Duty Description	Post-Test	Group	Site (Cumulative)	State	Nation
1	Machinery and Equipment	73.1	73.1	69.1	69.0	64.8
2	Tools and Safety	70.8	70.8	70.7	71.2	69.1
3	Electronics and Electrical Principles	68.2	68.2	59.9	60.9	53.7
4	Hydraulics and Pneumatics	34.8	34.8	53.1	53.3	51.6
5	Motors and Motor Controls	41.7	41.7	44.2	45.8	39.7
6	Mechanism Drives	41.2	41.2	37.1	38.2	38.0
7	Industrial Robotics Systems	57.1	57.1	58.7	60.7	54.4
8	Blueprints and Schematics	47.4	47.4	55.1	55.8	50.0
Total		55.0	55.0	56.8	57.6	53.4
Performance - Psychomotor						
Job #	Job Title	Post-Test	Group	Site (Cumulative)	State	Nation
1	Connect and Operate a Circuit	28.0	28.0	43.1		
2	Assemble a Multiple Shaft Gear Drive System	86.7	86.7	91.2		
3	Read and Interpret an Industrial Blueprint	51.3	51.3	59.6		
4	Troubleshoot an Electrical Control System	100.0	100.0	98.2		
Total		64.8	64.8	71.6		



Contact Information

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