
Written and Performance Exam General Overview

- The intent of this exam is to assess the candidate's ability to teach the skills found in the Massachusetts Technical Education Framework.
- The written exam is a state-developed exam aligned to the frameworks which can be accessed [here](#). The performance exam is a NOCTI-developed teacher test and has been determined by DESE to align to the state frameworks.
- Many questions and tasks require a synthesis of knowledge based on experience in the field and may not be found in any book.
- Use this exam outline and the Massachusetts Technical Education Framework to focus your preparation for the exams.
- Candidates are encouraged to prepare for their written exam by reviewing textbooks and reference material which have been listed as part of this exam outline. These resources can be found using online search tools, online vendors, and websites.

Written Exam

- Number of Questions: 100
- Administration Time: 3 hours
- Passing Score: 70%
- Administration Method: Remote Proctored Online Testing Session

Written Exam Content Coverage

- 5% Health and Safety**
- 25% Hand and Power Tool Safety**
- 10% Reading Technical Drawings and Prints**
- 20% Fundamentals of Sheet Metal Work**
- 10% Fabrication and Pattern Layouts**
- 5% Welding and Plasma ARC Cutting**
- 5% Soldering Metals**
- 5% Design and Install Air Duct Systems**
- 5% Architectural Sheet Metal**
- 10% Sheet Metal Working Related Mathematics**

Written Exam Reference Materials (Reference Current Edition)

- **Sheet Metal Layout** by Leo A. Meyer (Goodheart-Willcox)
- **Today's 40 Most Frequently Used Fittings** by Richard Budzik (Practical Publications)
- **Heating, Ventilation, and Air Conditioning Pattern Development** by C. Zinngabe

Materials Needed for the Written Exam

- A four-function calculator is included in the online testing system. No other calculators are permitted.
- Scrap paper and pencil/pen are permitted.

Written Exam Sample Items

Each question on the exam consists of one incomplete sentence or question followed by four choices. Some items reference an image or diagram. A few sample items are included below; the correct answer is designated with an asterisk (*).

When drilling metal, what factors are used to determine the required speed of the twist drill:

- a. size of drill and motor.
- b. materials and size of drill bit (*)
- c. pulley and motor r.m.p.
- d. motor r.m.p. and material

Steel is primarily a mixture of:

- a. cold rolled steel and tin.
- b. iron and carbon. (*)
- c. hot rolled steel and zinc.
- d. zinc and carbon.

Performance Exam – COMING SOON!