

**Name:** \_\_\_\_\_

**Date:** Friday, June 2, 2023

**Teacher:** Teacher

**Course:** Manufacturing Engineering Technology, Grade 12,  
University/College Preparation

## Injection Mold Machining

Students will create a mold based on the provided material and drawings

**Expectations:** 12A1, 12A2, 12A4, 12B2, 12B3, 12D1, 12A1.2, 12A1.4, 12A2.4, 12A4.2, 12B2.3, 12B2.5, 12B3.1, 12B3.6, 12B3.7

Criteria	Level 4 (80% - 100%)	Level 3 (70% - 79%)	Level 2 (60% - 69%)	Level 1 (50% - 59%)
<b>Knowledge and Understanding</b>				
demonstrate the skills required to safely operate machine tools and equipment in the assembly or fabrication of a product	demonstrates the skills required to safely operate machine tools and equipment in the assembly or fabrication of a product with expertise	demonstrates the skills required to safely operate machine tools and equipment in the assembly or fabrication of a product capably	demonstrates the skills required to safely operate machine tools and equipment in the assembly or fabrication of a product with some capability	demonstrates the skills required to safely operate machine tools and equipment in the assembly or fabrication of a product with assistance
plan a detailed manufacturing process for production	plans a detailed manufacturing process for production with remarkable success	plans a detailed manufacturing process for production with credible success	plans a detailed manufacturing process for production with adequate success	plans a detailed manufacturing process for production with developing success
<b>Thinking</b>				
analyse the results of a production process, and modify operations, systems, and tooling as necessary	expertly analyses the results of a production process, and modifies operations, systems, and tooling as necessary	competently analyses the results of a production process, and modifies operations, systems, and tooling as necessary	adequately analyses the results of a production process, and modifies operations, systems, and tooling as necessary	analyses the results of a production process, and modifies operations, systems, and tooling as necessary, with assistance
choose suitable materials and processes	chooses suitable materials and processes with a high degree of effectiveness	chooses suitable materials and processes with considerable effectiveness	chooses suitable materials and processes with some effectiveness	chooses suitable materials and processes with limited effectiveness
<b>Communication</b>				
generate product specifications through the accurate interpretation of engineering drawings, sketches, and reports	generates product specifications through the accurate interpretation of engineering drawings, sketches, and reports with remarkable success	generates product specifications through the accurate interpretation of engineering drawings, sketches, and reports with credible success	generates product specifications through the accurate interpretation of engineering drawings, sketches, and reports with adequate success	generates product specifications through the accurate interpretation of engineering drawings, sketches, and reports with developing success

apply relevant mathematical skills, scientific concepts, and technological literacy and communication skills in planning and implementing manufacturing processes	always or almost always applies relevant mathematical skills, scientific concepts, and technological literacy and communication skills in planning and implementing manufacturing processes	usually applies relevant mathematical skills, scientific concepts, and technological literacy and communication skills in planning and implementing manufacturing processes	sometimes applies relevant mathematical skills, scientific concepts, and technological literacy and communication skills in planning and implementing manufacturing processes	rarely applies relevant mathematical skills, scientific concepts, and technological literacy and communication skills in planning and implementing manufacturing processes
<b>Application</b>				
use advanced measuring tools to calculate measurements in both metric and US customary/British imperial units	masterfully uses advanced measuring tools to calculate measurements in both metric and US customary/British imperial units	skilfully uses advanced measuring tools to calculate measurements in both metric and US customary/British imperial units	satisfactorily uses advanced measuring tools to calculate measurements in both metric and US customary/British imperial units	is beginning to use advanced measuring tools to calculate measurements in both metric and US customary/British imperial units