

ME01: Basic Machines

Catalogue Number	ME01-0001
Category	JobMaster
Duration	15 Hours

Introduction to Basic Machines

Skill 1: Measurement

- 1.1: Metric and Imperial Systems
- 1.2: Linear Distance
- 1.3: Weight and Mass
- 1.4: Force
- 1.5: Skill Overview
- 1.6: Skill Drill
- 1.7: Concept Review

Skill 2: Torque

- 2.1: Measurement
- 2.2: Calculation
- 2.3: Skill Overview
- 2.4: Skill Drill
- 2.5: Concept Review

Skill 3: Work

- 3.1: Measurement
- 3.2: Calculation
- 3.3: Skill Overview
- 3.4: Skill Drill
- 3.5: Concept Review



Skill 4: Power

- 4.1: Measurement
- 4.2: Calculation
- 4.3: Skill Overview
- 4.4: Skill Drill
- 4.5: Concept Review

Skill 5: Horsepower

- 5.1: Measurement
- 5.2: Calculation
- 5.3: Skill Overview
- 5.4: Skill Drill
- 5.5: Concept Review

Skill 6: Friction

- 6.1: Static Friction
- 6.2: Kinetic Friction
- 6.3: Rolling Friction
- 6.4: Coefficient of Friction
- 6.5: Measurement
- 6.6: Skill Overview
- 6.7: Skill Drill
- 6.8: Concept Review

Skill 7: Velocity

- 7.1: Measurement
- 7.2: Calculation
- 7.3: Skill Overview
- 7.4: Skill Drill
- 7.5: Concept Review



Skill 8: Acceleration

- 8.1: Calculation
- 8.2: Linear and Gravitational Acceleration
- 8.3: Angular Acceleration
- 8.4: Skill Overview
- 8.5: Skill Drill
- 8.6: Concept Review

Skill 9: Mass and Inertia

- 9.1: Newton's First Law
- 9.2: Newton's Second Law
- 9.3: Newton's Third Law
- 9.4: Skill Overview
- 9.5: Skill Drill
- 9.6: Concept Review

Skill 10: Energy

- 10.1: Potential Energy
- 10.2: Kinetic Energy
- 10.3: Conservation of Energy
- 10.4: Skill Overview
- 10.5: Skill Drill
- 10.6: Concept Review

Skill 11: Mechanical Advantage

- 11.1: Actual Mechanical Advantage
- 11.2: Ideal Mechanical Advantage
- 11.3: Efficiency
- 11.4: Skill Overview
- 11.5: Skill Drill
- 11.6: Concept Review



Skill 12: Inclined Planes

- 12.1: Calculations
- 12.2: Applications
- 12.3: Skill Overview
- 12.4: Skill Drill
- 12.5: Concept Review

Skill 13: Wedges

- 13.1: Calculations
- 13.2: Applications
- 13.3: Skill Overview
- 13.4: Skill Drill
- 13.5: Concept Review

Skill 14: Screws

- 14.1: Calculations
- 14.2: Applications
- 14.3: Skill Overview
- 14.4: Skill Drill
- 14.5: Concept Review

Skill 15: Levers

- 15.1: Calculations
- 15.2: First Class Levers
- 15.3: Second Class Levers
- 15.4: Third Class Levers
- 15.5: Skill Overview
- 15.6: Skill Drill
- 15.7: Concept Review



Skill 16: Wheel and Axles

16.1: Calculations

16.2: Applications

16.3: Skill Overview

16.4: Skill Drill

16.5: Concept Review

Skill 17: Pulley

17.1: Single Pulleys

17.2: Multiple Pulleys

17.3: Calculations

17.4: Applications

17.5: Skill Overview

17.6: Skill Drill

17.7: Concept Review

Comprehensive Post-Test