

# ACTIVITY ONE

## Overview

In this activity you will complete the initial inventory, take the pre-test, watch a video, and read from the textbook titled *Energy, Power, and Transportation*.

### STEP 1

## Introduction

Welcome to the Applied Technologies Transportation Module. While working in this module, you will explore the components and proper maintenance of several types of vehicles.

### STEP 2

## Inventory

While working in this module, it will be your responsibility to maintain all components of the module.

**Inventory Work Sheet**

Name: \_\_\_\_\_ Module: \_\_\_\_\_ Class: \_\_\_\_\_ Period: \_\_\_\_\_

Directions: Fill out this inventory sheet to verify the inventory on hand. The work sheet is to be completed at the beginning of the activity. Take the inventory of the inventory sheet at the beginning of the activity, and identify any missing or damaged items. If you find any missing or damaged items, notify the instructor. The instructor will provide the necessary information to the instructor.

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
1 - Applied Technologies Transportation Module Student Guide	_____		_____
1 - Text titled <i>Energy, Power, and Transportation</i>	_____		_____
1 - TRANSMOD 2000 tool cabinet and Racer	_____		_____
1 - Booklet titled <i>TRANSMOD 2000 Maintenance Guide</i>	_____		_____
1 - Videotape titled <i>Away We Go! All About Transportation</i>	_____		_____
1 - Set of three videotapes titled <i>T-10 Transportation Systems</i>	_____		_____
1 - Booklet titled <i>Dispatcher and Trucker Game Book</i>	_____		_____

\_\_\_\_\_

Locate the **Inventory Work Sheet** in the module area. Follow the directions on the sheet. Please take a few minutes to inventory the module at this time. If anything is missing, notify the instructor. Keep the work sheet in your student notebook. The instructor will be checking it from time to time, and it must be turned in upon completion of **Activity Ten**.

1- Applied Technologies Transportation Module Student Guide

1- TRANSMOD 2000 tool cabinet and Racer

1- Booklet titled *TRANSMOD 2000 Maintenance Guide*

1- Text titled *Energy, Power, and Transportation*

1- Videotape titled *Away We Go: All About Transportation*

1- Set of three videotapes titled *T-10 Transportation Systems*

1- Booklet titled *Dispatcher and Trucker Game*

## INTRODUCTION

Transportation technology is the study of how land, air, marine, space, and fixed transportation systems help us move people and materials both short and long distances. The module's activities provide hands-on experience with the 1/4" scale TRANSMOD 2000 Racer, five videotapes, model construction using LEGO materials, and a game in which students use skills in geography and applied math.

## STUDENT OUTCOME

After completing this 10-activity, self-paced module, the students will have reached a better understanding of the inputs, processes, and outputs of transportation systems and how they affect our civilization.

## STUDENT OBJECTIVES

1. Students will explore inputs and outputs concerning transportation.
2. Students will study seven resources concerning transportation.
3. Students will investigate power, control, and suspension systems of automobiles.
4. Students will disassemble a shock unit.
5. Students will research internal combustion engines.
6. Students will demonstrate the ability to test compression, inspect a spark plug gap, and replace an air filter.
7. Students will assemble a model.
8. Students will practice map skills.
9. Students will dispatch shipments on tractor trailers.
10. Students will identify vehicle safety standards.
11. Students will plan a trip by calculating time and distance relationships.
12. Students will explore marine, air, space, and fixed transportation, including such fixed systems as conveyors and pipelines.

## REQUIRED MATERIALS & EQUIPMENT

- 1- Applied Technologies Transportation Module Student Guide
- 1- Text titled *Energy, Power, and Transportation*
- 1- TRANSMOD 2000 Workbench with the TRANSMOD 2000 Racer
- 1- Booklet titled *TRANSMOD 2000 Maintenance Guide*
- 1- Videotape titled *Away We Go: All About Transportation*
- 1- Set of three videotapes titled *T-10 Transportation Systems*
- 1- Booklet titled *Dispatcher and Trucker Games*

# Inventory Work Sheet

Name: \_\_\_\_\_ Module: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Directions:** Follow the instructor's directions for performing the inventory on the module. This work sheet is used at the beginning and at the end of every activity. Take the **Inventory Work Sheet** and verify that all materials are in the module area, and that they are in proper working order. If the item is in the module area and is not damaged, shade in the number (in the box next to the item) which corresponds to today's activity number. The left side is for inventory at the beginning of class and the right side is for inventory at the end of the class. If anything is misplaced or broken, notify the instructor.

## BEGINNING

1	2	3	4	5
6	7	8	9	10

1 - Applied Technologies Transportation  
Module Student Guide

1	2	3	4	5
6	7	8	9	10

1 - Text titled *Energy, Power, and Transportation*

1	2	3	4	5
6	7	8	9	10

1 - TRANSMOD 2000 Workbench with the  
TRANSMOD 2000 Racer

1	2	3	4	5
6	7	8	9	10

1 - Booklet titled *TRANSMOD 2000 Maintenance Guide*

1	2	3	4	5
6	7	8	9	10

1 - Videotape titled *Away We Go: All About Transportation*

1	2	3	4	5
6	7	8	9	10

1 - Set of three videotapes titled *T-10 Transportation Systems*

1	2	3	4	5
6	7	8	9	10

1 - Booklet titled *Dispatcher and Trucker Games Book*

## ENDING

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