

# NATEF TASK SHEET --- SECTION A.6 B.1 (P-1)

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_

## SC1: DETERMINING STATE OF CHARGE

*Just how much power is in that battery?*

**Purpose:** Student will determine state of charge in two batteries using the voltage method below. Student will be aware of two other methods of determining charge.

**Procedure:** Watch power point SC1 and fill in charts below, test battery voltage, and determine state of charge. Use fender covers, seat covers, and floor mats. Make recommendations to bring vehicles/batteries up to factory specifications.

**Materials Needed:** 1. Safety Glasses, Volt-Ohm-Meter  
2. Batteries or vehicles with batteries (See Instructor)

### 1. BATTERY VOLTAGE METHOD: *Fill out charts below from Power Point SC1:*

OPEN CIRCUIT VOLTAGE CHART	
Open Circuit Voltage (volts)	Percent Charge
___ or less.....	0%
___.....	25%
___.....	50%
___.....	75%
___ or higher..	100%

2. SPECIFIC GRAVITY METHOD: REFERENCE CHART	
Red _____	Water - Dead
White _____	Recharge
Green _____ - _____	Full Charge
IF READINGS VARY BY MORE THAN 0.050, REPLACE BATTERY	

### 3. BATTERY EYE METHOD: Fill in blanks below from power point:

- ◇ \_\_\_\_\_ = 75-100 percent charge. The battery is adequately charged for further testing.
- ◇ \_\_\_\_\_ or \_\_\_\_\_ = 0-75 percent charge. The battery is NOT ADEQUATELY charged and must be charged.
- ◇ \_\_\_\_\_ OR \_\_\_\_\_ COLOR = BATTERY MUST BE REPLACED.

**Vehicle1** Findings Battery 1: \_\_\_\_\_ Volts Percentage Full \_\_\_\_\_

**Vehicle2** Findings Battery 2: \_\_\_\_\_ Volts Percentage Full \_\_\_\_\_

**DOES THIS TEST TELL YOU WHETHER THE BATTERY IS GOOD OR BAD? YES NO** CIRCLE ONE

**YOUR RECOMMENDATIONS:** \_\_\_\_\_

*Do the batteries need to be charged? Do the batteries need to be cleaned? Any other problems with the batteries?*

#### INSTRUCTORS EVALUATION

LEVEL OF SKILL ATTAINED	Initial	OVERALL SKILL EVALUATION	Points
DEMONSTRATES MASTERY (5)		DOCUMENTATION COMPLETENESS (1)	
PERFORMED INDEPENDENTLY (4)		SAFETY COMPLIANCE (1)	
CAPABLE, NEEDS PRACTICE (3)		WORK PROFESSIONALISM (3)	
ASSISTED IN PERFORMING (2)		LEVEL OF SKILL ATTAINED (1-5)	
NEEDS CLOSE SUPERVISION (1)		TOTAL SCORE	
<b>INSTRUCTOR'S SIGNATURE:</b> _____			