

Name: \_\_\_\_\_ 1st Total Percent: \_\_\_\_\_ % Period: \_\_\_\_\_

Partner: \_\_\_\_\_ 2nd Total Percent: \_\_\_\_\_ % Date: \_\_\_\_\_

M.T.H.S. - Auto Tech

Mr. S. Carlson

Team and Set #: \_\_\_\_\_

## LEGO Dacta Unit - Part B: Differential Assembly

*Intro to Automotive Engineering Unit Activities Check Sheet - Version 1.1 (One unit sheet per team)*

No.	Activity Description	Finish Date	1st Member Percent	2nd Member Percent	Initials
1.	<b>Turn in Part 1 First:</b> Before starting part 2, complete and turn in part 1 with your partner now.		---	---	
2.	<b>Continue Journal (5%):</b> A thorough entry should be made every day that you work and it will be an important part of your grade. It should include 3 parts for each day's dated entry: <b>Did:</b> , <b>Learned:</b> , and <b>Next:</b> . Show instructor your journal entries for this unit for signature and credit. <b>One journal per student.</b>		5?	5?	
3.	<b>Read Chapter 40 - Differential Assembly (pp. 416-421) (10%):</b> Take careful note of all pictures, diagrams, and their captions. (You must do the next item to get credit for this		10?	10?	
4.	<b>Do Chapter 40 Q's &amp; A's (p. 421: 1-15) (10%):</b> For most credit use correct Q, A, space form. <b>SEE REVERSE SIDE. One set per student</b>		10?	10?	
5.	<b>Do Card 16 - Differential Assembly Tracked Vehicle (10%):</b> Build tracked vehicle per instructions on Card 16.		10?	10?	
6.	<b>The Card 16 Challenge (25%):</b> Motorize your vehicle and then place a short axle in one side to stop that track and see what happens with your vehicle. Show instructor and describe here what it does:		25?	25?	
7.	<b>Differential and Gear Train Drawing (10%):</b> Draw and label the gear total gear train of the Card 16 vehicle here or on attached paper:		10?	10?	
8.	<b>Differential (equations?) and Gear Train Math (10%):</b> Calculate the Axle Ratio here and show work:		10?	10?	
9.	<b>Calculate the overall ratio here (15%):</b> Draw and label the gear total gear train of the Card 16 vehicle here and calculate overall ratio and show work:		15?	15?	
10.	<b>Final Inventory (if not continuing into next unit) (?%):</b> Disassemble your device and completely replace all of the parts in your set in the correct bins using inventory sheet and check in your complete set. Include a final chain check of 22.5 inches and a missing parts list. <b>Your final inventory is very important. Do a good job.</b>		?	?	
11.	<b>This Check Sheet Turned In (5%):</b> Include all above parts in order and <b>STAPLE THEM NEATLY</b> to this checksheet and place total percent at top to the right of your name. <b>0% here if you include any fuzzy spiral notebook papers.</b>		5?	5?	

\* | = Instructor's Signature

## How To Do Q, A, Space Form

### Instructions:

1. Use 8-1/2" x 11" 3-hole notebook paper. Try **NOT** to use spiral bound or 8" x 10-1/2".
2. Write in Your Name and Period # at the top as shown below.
3. Leave a blank space between the Title and Question 1.
4. Write the question number just to the left of the red line.
5. Write in a capitol "Q:" just to right of red line and write out question.
6. Write a capitol "A:" in the **next open line** as shown below and write out your answer.
7. Leave a blank space at shown below.
8. Start next question as in # 4 above and continue until assignment completed.

	Your Name	Period #
	Chapter #: Chapter Title, Page #'s	
	(Leave this space blank.)	
1.	Q: Write out the question exactly from book or a simplified version here. It may go more than one line.	
	A: Research and write out your answer to the question here. It may go more than one line also.	
	(Leave this space blank.)	
2.	Q: Write out the question exactly from book or a simplified version here. It may go more than one line.	
	A: Research and write out your answer to the question here. It may go more than one line also.	
	(Leave this space blank.)	
3.	Q: Write out the question exactly from book or a simplified version here. It may go more than one line.	
	A: Research and write out your answer to the question here. It may go more than one line also.	
	(Leave this space blank.)	
4.	Q: Write out the question exactly from book or a simplified version here. It may go more than one line.	
	A: Research and write out your answer to the question here. It may go more than one line also.	
	(Leave this space blank.)	