



Physical Science Lesson on Cars

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Title: Cars and Parts

Grade level: Kindergarten

Subject Area: Science and Technology and Engineering Education

Standard Area: Physical Sciences: Chemistry and Physics

S.K-2.A.1.1.3: Describe how technology can help people (e.g., home appliances, phones, computers, transportation).

S.K- 2.A.3.1.1: Describe a system as being made of multiple parts that work together

Subject Area: Reading, Writing, Speaking, and Listening

Standard Area: Speaking and Listening

1.6.K.A: Listen and respond appropriately to others in small and large group situations.

Essential Question(s): What are three parts of a car?

Behavioral Objective(s): Students will be able to point to three different parts of a car to the best of their ability.

Duration: Approximately 20-30 minutes

Materials and Equipment: Car book by Richard Sutton and Elizabeth Baquedano, parts of a car pictures, magnets, picture cards, lesson plan, early finisher worksheet, enrichment worksheet, and steering wheel cut outs for “Red light/Green light” game

Procedure

Introduction: We would be sitting on the carpet.

“Good afternoon class! Today we are going to learn about cars and their parts!”

Anticipatory Set: Pick up book.

“Let’s start by looking at this book about cars!” (Open book)

“Wow, look how much cars have changed throughout the years. Before the modern cars today, people used to drive automobiles, like this (point to some automobiles in the book) Now look at some of the transportation we have today (point to some modern vehicles). I see a nice sports car, Can one of my friends raising their hand tell us another form of transportation on

the page? Answer: bicycle, motorcycle, or race car. Good job! Is it just me or does anyone else notice that cars are made up of multiple parts? Answer: Yes, they have wheels and a steering wheel! You're exactly right! Cars have wheels, an engine, brakes, a steering wheel, and many other parts that make it work! Now let's continue reading to find out more about cars and their parts!" (Finish looking through the book with the kids and continue asking questions to keep them engaged)

Sequence of Lesson

Direct Instruction (I do):

"After looking through our Cars book, Can one of my friends sitting on their bottom criss cross applesauce tell me one thing they learned? Answer: Cars have wheels and brakes! Correct, cars are made up of wheels, brakes, and other parts!"

"Today, I want us to construct our own car on the magnetic board! Here we have the body of our car (Hold up the body of the car). Where on the board do you think I should put it? Answer: In the middle! Right, in the middle because the body of the car holds all of its parts together (Put the body of the car on the board). (Hold up the wheels) Now what are these? Answer: Wheels! Nice job, the wheels are what help the car move! Where should I put them? Answer: On the bottom. That's correct! The wheels lift a car off the ground to make it move from place to place (Put the wheels spaced out on the bottom). (Hold up steering wheel) This is a steering wheel, it helps the person driving a vehicle to make it move in the direction they want it to. (Demonstrate with the steering wheel) If I want my car to go straight, I will keep my steering wheel center. But if I want my car to go right, I will turn it to the right. The steering wheel goes in the back, right? Answer: No, it goes in the front! Oh, you're right (Put the steering wheel on the board). Look at this! This is an engine! Does anyone know what an engine does? Answer: It makes the car work! Right, an engine takes power and changes it into motion to make the car move! Without an engine, a car would not work! Where would we find the engine of the car at? Answer: At the front of the car. Good job! We would find an engine under the hood of the car."

(Hold up the seatbelt)

"Now I hope everyone can tell me what this is? Answer: A seatbelt! Right, we wear a seatbelt to keep us in our seat while the car is in motion! It is important that everyone in a car has their seatbelt on when the car is in motion."

“If a car didn’t have all of its parts working together, it would not work. In life, there are many things that are made up of parts like plants, toys, electronics, trains, boats, and airplanes!”

Guided Practice (We do): Give students 2 minutes to find one picture card around the room that has a part of a car to bring back to their carpet square. Then have the kids construct their own car with the picture cards. Each group should have a body, wheels, a steering wheel, and an engine. Remind kids that if they need help they can look at the car we constructed on the white board together.

Independent Practice (You do): During station time, students will each get a turn manipulating the magnetic car parts on the white board to form a car.

***Movement activity:** You could play the “Red light/Green light” game with the kids and give them each a steering wheel to move them through the game!

Safety Precautions:

Students will sit criss cross applesauce on their carpet square.

Student will raise their hand if they have something to say or a question to answer.

Students will walk to find their picture card around the room.

The importance of wearing a seatbelt in the car will be emphasized during the lesson.

Students will be reminded that only adults drive cars.

Closure: Great job today class! I loved how everyone participated and cooperated during the lesson! I hope you all learned a little bit more about how cars are made up of multiple parts to make them work! Now remember we only got to talk about a few parts of a car today, but in 1st grade you will learn more!”

Assessment/Evaluation: As a ticket-out-the-door, students will be called up individually to point to three different parts of a car out of a selection of picture cards to the best of their ability.

Assignments (if any): No assignments are necessary for this lesson.

Special Considerations:

Early Finishers: This population of students would get a worksheet to match the different parts to where they would go on a car.

Remediation: Any students having trouble grasping the concept would be given more time to work with the teacher’s helper in a small group reviewing the concepts a second time.

Enrichment: The students who may be gifted would be given a worksheet to draw a picture of a car and circle its parts to the best of their ability.

Special Accommodations: My student with a hearing impairment would be seated towards the front of the room so it is easier for them to read my lips and hear my instruction. As for my student with ADHD, they would be seated on a carpet square with the least amount of stimulation around them.

Bibliography: On the next page

Standards - View Standards by Subject Area and Grade Level or Course. (2015). Retrieved on October 12, 2015 from <http://www.pdesas.org/Standard/Views#105|792|0|0>

Circle Time: Cars and Other Wheels. (2012). Retrieved on October 13, 2015 from <http://www.brighthubeducation.com/pre-k-and-k-lesson-plans/11137-all-about-cars-and-other-wheels/>