

# Unit Outline –Pre-K Literacy/Math

**INTRODUCTION:** This unit outline provides an example of how teachers may integrate performance tasks into a unit. *Teachers may (a) use this unit as it is described below; (b) integrate parts of it into a currently existing curriculum unit; or (c) use it as a model or checklist for a currently existing unit on a different topic.*

## Pre-Kindergarten Unit: Trucks

### UNIT TOPIC AND LENGTH:

- Students will explore trucks, over the course of one month or longer. This unit on trucks consists of 4 sequenced learning plans. Each activity or learning plan works best with a small group of 4-5 students, in centers, over the course of one week. Duration of student engagement in tasks will vary, but the recommendation is that each activity is 20 minutes or less.

### COMMON CORE LEARNING STANDARDS:

#### ELA & Literacy: Reading

- PK.RI.1: With prompting and support, ask and answer questions about details in a text.
- PK.RI.10: With prompting and support, actively engage in group reading activities with purpose and understanding.

#### ELA & Literacy: Writing

- PK.W.2: With prompting and support, use a combination of drawing, dictating, or writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

#### Mathematics: Counting and Cardinality

- PK.CC.4: Count to answer “how many?” questions about as many as 10 things arranged in a line, a rectangular array, or a circle, or as many as 5 things in a scattered configuration; given a number from 1-10, count out that many objects.

#### Mathematics: Operations and Algebraic Thinking

- PK.OA.1: Demonstrates an understanding of addition and subtraction by using objects, fingers, and responding to practical situations (e.g. if we have 3 apples and add two more, how many do we have?).

#### Mathematics: Measurement and Data

- PK.MD.1: Identify measurable attributes of objects, such as length, and weight. Describe them using correct vocabulary. (E.g. small, big, short, tall, empty, full, heavy, and light.)

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<p><b>BIG IDEAS/ENDURING UNDERSTANDINGS:</b></p> <ul style="list-style-type: none"> <li>➤ We can learn about trucks by exploring our community and by reading informational texts on trucks.</li> <li>➤ Trucks have different parts with names.</li> <li>➤ We can measure, add, subtract, and count toy trucks.</li> <li>➤ Trucks serve different purposes in our community.</li> </ul>	<p><b>ESSENTIAL QUESTIONS:</b></p> <ul style="list-style-type: none"> <li>➤ What is a truck?</li> <li>➤ What are some different types of trucks?</li> <li>➤ What do you notice about the trucks in our community?</li> <li>➤ How do we use the trucks in our community?</li> </ul>
<p><b>CONTENT:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Truck Facts</b> <ul style="list-style-type: none"> <li>▪ Trucks in the local community</li> <li>▪ Basic parts of a trucks: tires, bumper, fender, hubcap, headlights)</li> <li>▪ Purposes of trucks in different communities</li> </ul> </li> <li>-----</li> <li>➤ <b>Informational Text</b> <ul style="list-style-type: none"> <li>▪ Texts that provide facts on trucks</li> <li>▪ Details from text that provide the needed information</li> <li>▪ Images and media that provide information</li> </ul> </li> <li>-----</li> <li>➤ <b>Math Operations</b> <ul style="list-style-type: none"> <li>▪ 1 to 1 correspondence of trucks</li> <li>▪ Adding/Subtracting trucks</li> <li>▪ Counting trucks</li> <li>▪ Building roadways for trucks</li> </ul> </li> <li>-----</li> <li>➤ <b>Math Data</b> <ul style="list-style-type: none"> <li>▪ Discuss, measure and compare the attributes of trucks, such as their wheels, doors, etc.</li> <li>▪ Map and build real life examples of road ways for trucks.</li> </ul> </li> </ul>	<p><b>SKILLS:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Explore and observe</b> trucks in the local neighborhood.</li> <li>➤ <b>Identify</b> parts of trucks. (I.e. tires, bumper, fender, hubcap, headlights, etc.)</li> <li>➤ <b>Draw</b> trucks and parts.</li> <li>➤ <b>Discuss</b> the different types of trucks and their attributes and/or functions</li> <li>➤ <b>Design and create</b> a map for transportation of trucks</li> <li>-----</li> <li>➤ <b>Comprehend</b> non-fiction picture books to learn about trucks.</li> <li>➤ <b>Recognize and explain</b> that books provide information and facts</li> <li>➤ <b>Articulate</b> what is known and what is wondered about trucks.</li> <li>➤ <b>Identify</b> important details from read-aloud texts.</li> <li>-----</li> <li>➤ <b>Explore then describe</b> how to add and subtract trucks to get a total number.</li> <li>➤ <b>Count</b> to answer how many trucks.</li> <li>➤ <b>Demonstrate</b> one to one correspondence by matching number cards to trucks.</li> <li>-----</li> <li>➤ <b>Identify</b> attributes of trucks. (I.e. small, big, long, tall, heavy, etc.)</li> </ul>

**VOCABULARY/KEY TERMS:**

**Tier 1:** Truck, trucks, stop, go, wheel, wheels, ice, cars, sky, rain

**Tier 2:** Trucking, sign, stop sign, yield, turn, horn, mirror, fire, sidewalk, garbage, mud, ladder, door, driver, step, lights, gate, fence, garage, window, feet, smoke, city, enter, exit, north, south, east, west, smog, fog, foggy, sight, icy

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road, bakery, moving highway, under, over, bridge, river, land, bicycle, tricycle, blocks, buses

**Tier 3:** One way, right turn, left turn, rear view, hubcap, hydrant, wires, rubber, sewer, mud flaps, drop ladder, bumper, fender, trunk, headlights, hazard lights, storage, side, rear, wipers, fluid, gas, liquid gas, inches, tunnel, tunnel ahead, soot, arrow, speed, limit, speed limit, city line, bus line, sky line, Do Not Enter, license, skid, slippery, directions routes, livestock, ramp, elevated, traffic, tailgate, oil truck, gasoline, gasoline truck, cement, cement truck oil, gas

## ASSESSMENT EVIDENCE AND ACTIVITIES:

### INITIAL ASSESSMENT :

- Prompt students to share what they already know about trucks, making connection to real life experiences.
- Document student observations while on a community walk; ask questions about what they wonder.
- After a whole group read aloud on trucks, discuss and document the details they learned from the book.
- Dictate student responses on what they already know about trucks on chart paper and write the students' names next to their responses.
- Identify and differentiate between different types of trucks and their function in the community. If a student will not share aloud in a whole group setting, prompt the student one to one.
- Introduce a variety of trucks in photographs. Encourage students to discuss similarities and differences and to draw what they notice about the trucks. Document their process and ask mathematical questions.
- Introduce adding and subtracting skills while playing with toy trucks.
- Explore the directional concepts with students.

### FORMATIVE ASSESSMENT:

- Demonstrate solutions to truck related math equations including adding and subtracting
- Identify and differentiate between different types of trucks and their measurable attributes.

### FINAL PERFORMANCE TASK:

- Encourage students to use a combination of drawing, dictating, or writing to provide details about what they learned from an informational text about trucks (*See Literacy Task, "Trucks"*).
- Demonstrate solutions to truck-related mathematical concepts including adding and subtracting (*See Math Task, "Trucks?"*).

### EXTENSION:

Create a class Storybird at:  [Storybird- Web 2.0 Application for Sharing Observations and Stories](#)

Children work in small groups of three or four to devise a plan to take care of classroom plants in a Web 2.0 application, such as Storybird. Children work together to develop strategies to ensure that each plant will receive the proper care and placement in the classroom. Students monitor the plant's growth in the classroom over a three to four week period and, with prompting and support, detail their work on the visual chart.

Teachers can document the process through observation notes, pictures, and videos of students engaged in the development of their plan.

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## LEARNING PLAN & ACTIVITIES:

Week 1: *Trucks, Trucks!* Literacy task with an informational text provide students with an introduction to trucks.

Week 2: Community walk: Observe and Photograph trucks in the community.

*Let's compare trucks!* Discuss and compare similarities and differences between trucks in the community and trucks in the classroom.

Week 3: *Trucks-* A mathematical game with addition & subtraction

Week 4: *Trucks travel:* Design and build highways, bridges, ramps, parking lots, service centers for trucks in block area.

## RESOURCES

### CHILDREN'S BOOKLIST:

Truck by Donald Crews

*I Love Trucks!* by Philemon Sturges

Trucks by Byron Barton

Harry the Dirty Dog by Gene Zion

Duck in the Truck by Jez Alborough

Construction Trucks by Jennifer Cambria

### TEACHER RESOURCES:

Heroman, Cate & Jones, Candy (2004). *Literacy: The Creative Curriculum Approach*. Washington, DC: Teaching Strategies, Inc.

Copley, Juanita V., Jones, Candy & Dighe, Judith (2007). *Mathematics: The Creative Curriculum Approach*. Washington: DC Teaching Strategies, Inc.