

Everything is planned for you!

Teacher planning page with objectives, fun facts, supply lists

Guiding questions (and answers) to help promote discussion

Teacher-Recommended Book List

Step-by-step directions for each activity

Language Board with detailed pictures

Planning Page - Wheels & Axles

Recommended Supplies:
• small shopping cart
• wagon
• skateboards
• wheels or circular rods

Learning Objectives:
• The students will identify a problem and develop a solution to solve it.
• The students will design, build, and test something through their play.

Guiding Questions - Wheels & Axles

What are some parts of a car?
Provide a toy car for students to explore. Ask them to identify parts that they know.

How do you think the wheels on a car spin?
Wheels on a car are connected by a bar under the car that goes in the center of the wheel called an axle.



Scientific Investigation - Wheels & Axles

Can you build a car that will roll?
Young children use their understanding of ramps, force, motion, tools and engineering to design a vehicle that will roll. This is a great simple machine challenge for the end of the unit.

Can you name some things that have wheels?
• scooters
• bicycles
• skateboards
• bus
• truck
• Ferris wheel
• wagon
• shopping cart

Recommended Supplies:
• axle - pencils, thin markers, dowel rods
• wheels - empty spools, round holes in the middle, washers
• small wooden blocks, small tape

Procedure:
1. Provide a variety of supplies for this challenge to the students.
2. Allow students to explore the wheels and axles. Encourage them to test their inventions and make adjustments as necessary over the course of the unit.

Learning Objectives:
• The students will identify a problem and develop a solution to solve it.

Labeling a Picture - Wheels & Axles

Can you label the picture?
Students gain understanding of concept of word through daily experience with reading. They learn that print shows meaning and illustrates what the words mean. Develop reading skills with this labeling activity.

Recommended Supplies:
• file folder
• hook & loop circle dots
• copies of labeling pages

Procedure:
1. Cut, copy, and laminate the individual labels. Attach them to a file folder, in front of a file folder, or on a board.
2. Apply hook & loop circle dots to the back of each label. Store labels in a file folder when not in use.
3. Students read the label and attach the label to the appropriate picture.

Learning Objectives:
• The students will demonstrate an understanding of the concept of word through daily experience with reading.

Book Recommendations - Wheels & Axles





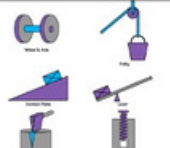
What is a Wheel and Axle? by Lloyd Douglas
This book is a great emergent non-fiction reader for a science center. Bright pictures, predictable text, and strong picture clues make this book a must-have in the early childhood classroom.

Wheels and Axles by Kirsten Chang
This emergent science text is a fantastic way to introduce students to how wheels and axles make work.

Wheels and Axles by Stan Smith
Using simple text and labeled photographs, this book will help young learners understand how a wheel and axle work. This book is a great addition to the science center.

Let's Find Wheels by Wiley Blevins
Students will delight in finding wheels and axles in their everyday lives after reading this book. Photographs and short text highlight the many uses of wheels and axles in the real world.

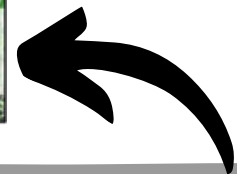
Wheels & Axles Language Board

 wheel	 axle	 car
 force	 machine	



4 Full Color Resource Posters

Vibrant colors
to attract
students'
attention



Clear, concise sentences
to reinforce the concept



STEM & Literacy

Create and Explore

WHEELS & AXLES
Draw the car you built with wheels and axles.



Vocabulary Tracing Cards



wheel




axle

Focus Question
Can you build a car that will roll?




Vocabulary cards to hang around the science center

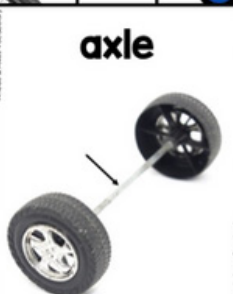
wheel
a round object spins on an axle




force
push or pull



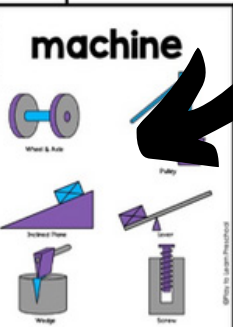
axle
a bar that goes thru the center of a wheel



roll
to move by turning wheels



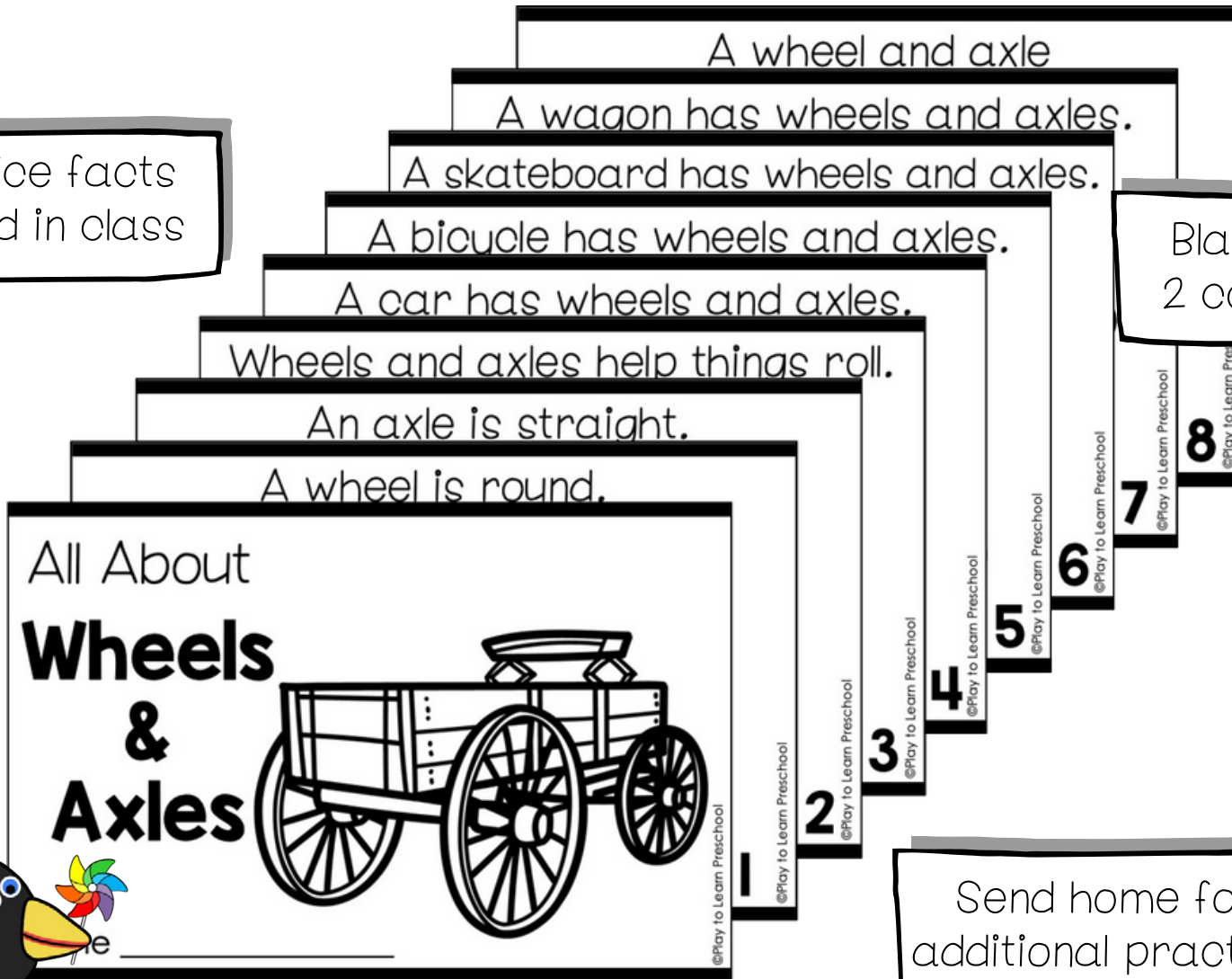
machine
things that make work easier



Student Mini-Books

Practice facts
learned in class

Black & White
2 copies/page



Send home for
additional practice



Looking for More Preschool Resources?

SAVE
\$\$\$

GROWING
Circle Time Bundle

Lifetime
Updates



<https://www.teacherspayteachers.com/Product/Preschool-Thematic-Units-Bundle-6747714>

Have fun playing and learning with your students!



Meet Jamie

Jamie is the founder and C.E.O. of Play to Learn Preschool. She has her bachelor's degree in Early Childhood Education and a master's degree in reading education. She has taught in both public and private schools and works tirelessly to create meaningful and delightful preschool experiences for both her virtual and in-person preschool students.

Additional Resources:

