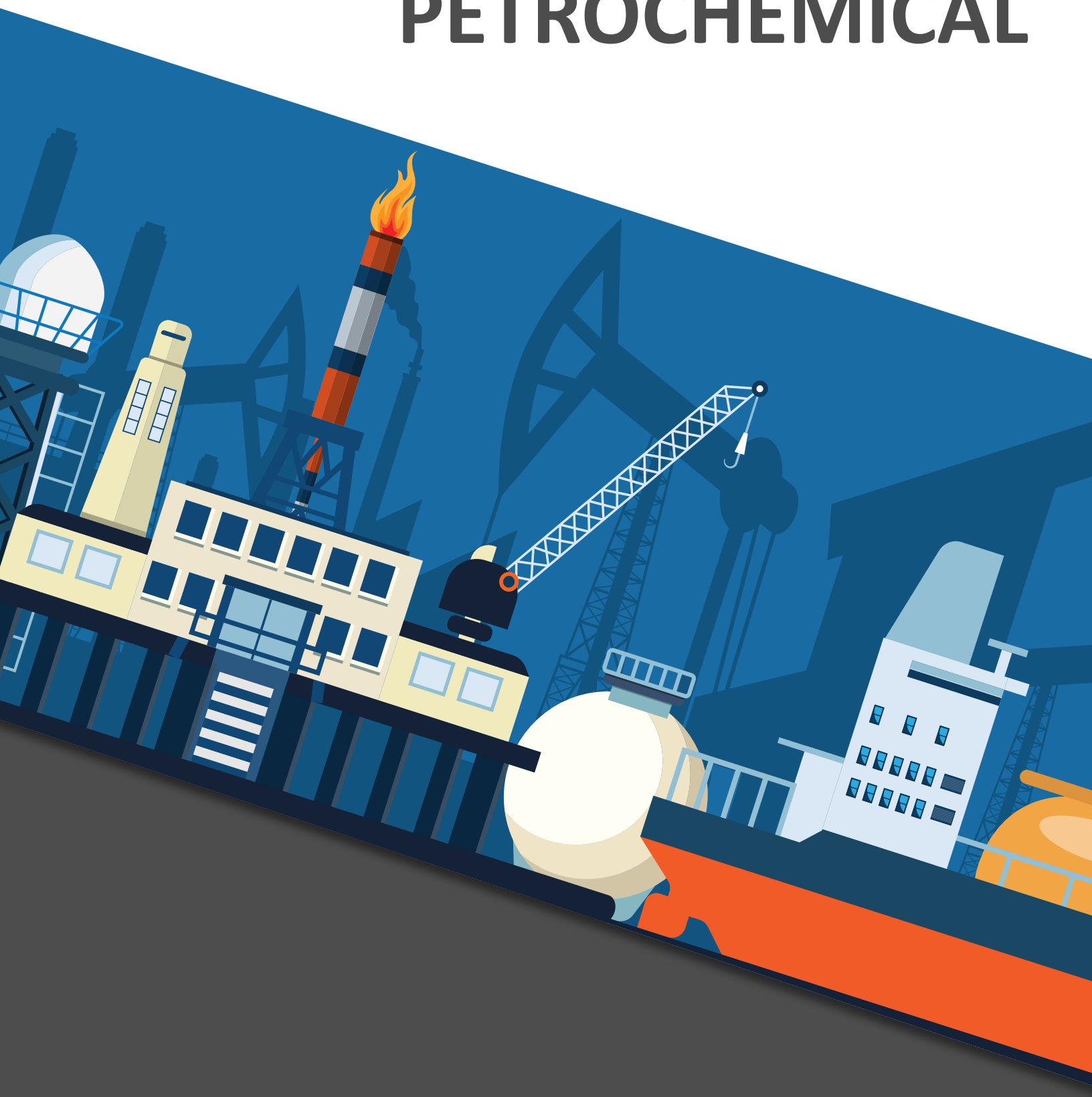
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Language and Literacy

Alphabet Sort: Themed Alphabet

EZ.020.LA.1001-1002

Activity Type:
Free Choice

Objectives:
Students will identify and recognize uppercase and lowercase letters.
Students will sort letters by different attributes.

Each themed classroom includes a magnetic alphabet. A featured activity will be included with each themed magnetic alphabet. Using letter tiles and sorting mats, students sort themed letters by different attributes like vowels and consonants or by shapes, like curvy and straight lines. This exposure and repetition of letters helps students easily recognize the alphabet in both school and everyday environments.

WHAT TO DO

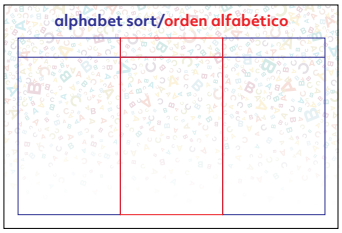
1. Introduce the sorting boards and letters to the students. Write student- or teacher- determined sorting categories on the boards. Consider categories such as vowels versus consonants, and letter shapes, such as curvy lines, straight lines, or a combination of both.
2. Place letters in a cup, bowl, or other container. Have students remove a letter, say the letter name, and sort into the appropriate category. Continue sorting until all the letters have been sorted.

PLAY TIPS

- Have students write letters in pre-determined categories rather than sorting physical letters.
- Ask students to make letters using Play-Doh or clay and have them sort the letters into categories.

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Mathematics

More or Less: Number Cards

EZ.020.LA.1003-1004

Activity Type:
Small Group

Objectives:
Students will develop one-to-one correspondence.
Students will compare sets of objects using relative language.

Each themed classroom includes themed number cards. A featured activity will be included with each set of themed number cards. Math manipulatives and tools help students make direct correlations between visual numbers and objects. Using manipulatives, students make comparisons between numbers using comparative language like “more than” and “less than.”

WHAT TO DO

1. Make a set of number cards (1-10 or 1-20) for each student in the small group using simple copy paper. Provide students with a handful of manipulatives.
2. Choose a themed number card and ask students to choose a number card from their set that is either more or less than the card you have chosen. Assess for number recognition by asking students to count the objects on your card and count out objects to match their own card. Continue practicing with the set of numbers (1-10 or 1-20) in sequence or randomly.

PLAY TIPS

- Practice counting forwards and backwards using the number cards as a visual guide.
- Have students create patterns using multiple sets of number cards. For example, students can create a 1-2-1-2-1-2 or 1122-1122 pattern to start.

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Mathematics

Counting and Measurement

EZ.020.LA.1005

Activity Type:
Free Choice and Small Group

Objectives:
Students will count items up to 10 with one-to-one correspondence.
Students will begin to add to and take away items.
Students will begin to use nonstandard measurement tools.

Students use counting manipulatives, non-standard forms of measurement like Unifix Cubes, and themed counters, to practice one-to-one correspondence and early practices of measurement using themed math cards. Measurement can be an abstract concept for young children. Manipulatives like blocks, cubes, or cups provide a tangible way to understand concepts like length, and height. By physically comparing and ordering objects, they can build a foundation for understanding measurement units later.

WHAT TO DO

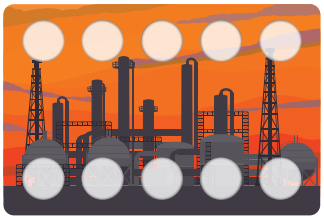
After modeling how to use the mats, place the counting and measurement mats in a learning center as a teacher-directed or student-directed experience. As a teacher-directed experience, guide students to use manipulatives to show one-to-one correspondence and length. As a student-directed experience, allow students to freely explore the manipulatives and mats.

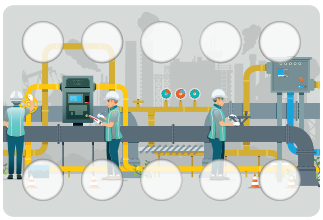
PLAY TIPS

- Use the math manipulatives to reinforce sorting by color and type. Encourage students to count how many are in each category. Encourage students to think of other ways to sort the manipulatives.
- Ask students to use the manipulatives to create patterns. Create simple pattern mats (ABAB, AABB, ABB) for additional support and guidance.

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Mathematics

Making Patterns

EZ.020.LA.1006

Activity Type:
Free Choice and Small Group

Objectives:
Students will recognize common 2-D shapes.
Students will sort by features and attributes.
Students will recognize patterns.

Students explore patterns and properties of shapes as they create whole images using pattern blocks and themed pattern block mats. Pattern blocks boost students' ability to think critically, make predictions, and test their predictions.

WHAT TO DO

Pattern block mats and pattern blocks work well as a self-directed activity. The intuitive nature requires little direction. Place the mats and pattern blocks out for students to explore freely, encouraging students to match the pattern block shape and color to the correlating space on the whole image.

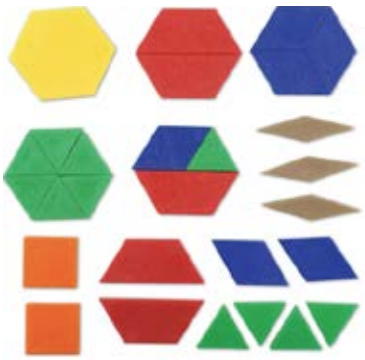
PLAY TIPS

- You can make your own pattern block cards by simply tracing pattern blocks on paper. Create a design using the pattern blocks and place the design on paper. Trace around the outer edge of your design and allow students to fill in the design with pattern blocks.
- Have students take a two-handed scoop of pattern blocks and sort by shape or color. Use graphing paper or a graphing mat to visualize the sorting process.
- Students can use mirrors to create patterns and make observations in the reflections. Ask students to describe what they are seeing as they create patterns in the mirrors.

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Language and Literacy

Pre-Writing Line Tracing

EZ.020.LA.1007

Activity Type:
Free Choice and Small Group

Objectives:
Students will build pre-writing skills by tracing curved, notched, and zigzag lines. Students will recognize directionality in print and writing.

Students work on emergent literacy and transition to letter formations by tracing lines, patterns, and shapes with a theme in a dry erase, reusable format. To connect to fine motor development, students are encouraged to add detail. Themed templates are included for tracing.

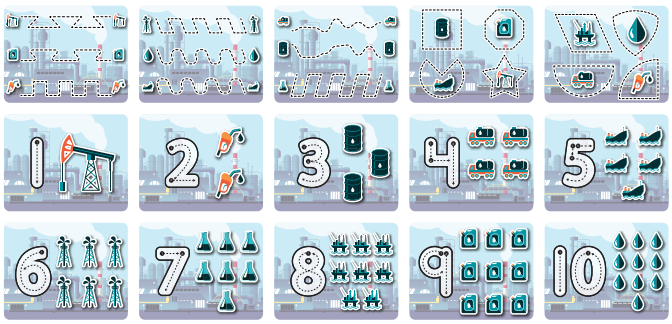
WHAT TO DO

1. Place the dry erase templates in the writing center. Students have the choice to use dry erase markers on the dry erase templates or place paper on the template and trace using a pencil/crayon. Remind students to start from left to right and top to bottom.
2. Encourage students to make their own tracing templates using the dry erase templates as a guide. Students can work on tracing shapes, lines, and numbers by repetitively tracing the same shape, line, or number using a different color crayon each time.

PLAY TIPS

- Include the themed tracing patterns in the writing center to align with other free-choice writing exercises. Using a clipboard will help students control the writing utensil.
- Tape the template vertically, on an easel or teacher board, to encourage the strengthening of fine motor development.

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Language and Literacy

Syllable Awareness

EZ.020.LA.1009

Activity Type:
Free Choice and Small Group

Objectives:
Students will understand and use recognizable and new vocabulary.
Students will begin to blend and segment syllables in words.

Phonological awareness is the ability to recognize and manipulate the sounds of spoken language. It is an essential skill in the process of learning to read and write. Young children participate in various sound activities to build sound awareness. Recognizing that words can be broken down into syllables or units of sound is a phonological skill.

WHAT TO DO

Introduce the vocabulary cards as a guided activity or free choice center activity. Have students clap the number of beats on the vocabulary card and indicate the number by moving the clip.

PLAY TIPS

- Provide simple instruments to reinforce the number of syllables. Rather than clap the number of syllables in a word, students can shake the number of syllables.
- Students can use their body to emphasize syllables in a word. Have students jump up and down, tap their toes, march in place, do jumping jacks, or tap their head to count syllables.

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Language and Literacy

Rhyming Awareness

EZ.020.LA.1010

Activity Type:
Free Choice and Small Group

Objectives:
Students will understand and use recognizable and new vocabulary.
Students will begin to recognize rhyming words.

Phonological awareness is the ability to recognize and manipulate the sounds of spoken language. It is an essential skill in the process of learning to read and write. Young children participate in various sound activities to build sound awareness. Rhyming activities help children listen for ending sounds in words, a precursor to phonics activities in late preschool.

WHAT TO DO

Introduce the rhyming cards as a small group or free choice activity. Say the words on the cards together and help students to identify the rhyming pairs. Students can connect the rhyming pairs by placing the cards side by side on the table.

PLAY TIPS

- Play rhyming words with body parts. Have students touch their head, nose, arm, etc. and think of a word that rhymes with the body part.
- Play, *I Spy with My Little Eye*, using target items in the classroom. For example, decide on something in the classroom, like *door* as the target word. Then state, "I spy with my little eye something that rhymes with *floor*." The students look around the classroom for something that rhymes with floor.

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Language and Literacy

Onset and Rime Awareness

EZ.020.LA.1011

Activity Type:
Free Choice and Small Group

Objectives:
Students will understand and use recognizable and new vocabulary.
Students will begin to identify and segment one-syllable words.

Phonological awareness is the ability to recognize and manipulate the sounds of spoken language. It is an essential skill in the process of learning to read and write. Young children participate in various sound activities to build sound awareness. Onset and rime activities help children identify patterns in words.

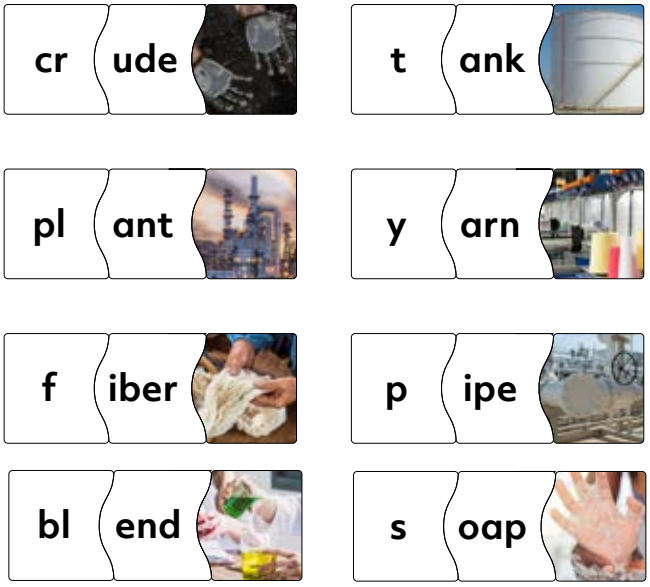
WHAT TO DO

Introduce the picture puzzles as a small group or free choice activity. As a small group exercise, model saying the onset together, the rime together, and the picture that identifies the word. As a free choice exercise, have the students put the pieces together to create a word.

PLAY TIP

Attach beginning and ending sounds to a set (2) of large dice. Have students roll the dice and say the word created, putting the onset and rime together.

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Language and Literacy

Cotton Swab Painting: Word Bank Words

EZ.020.LA.1012

Activity Type:
Free Choice and Small Group

Objectives:
Students will identify letters of the alphabet.
Students will create letters of the alphabet in unconventional ways.

Each themed classroom includes a word bank. A featured activity will be included with each themed word bank. Students will work on developing prewriting skills by exploring a variety of writing materials. Using paper, paint, and cotton swabs, students can practice writing word bank words, their name, letter sequencing, and other drawing activities of their choosing. Free writing is a powerful tool in preschool because it supports young children in developing their language skills, thinking creatively, and building confidence in their abilities.

WHAT TO DO

Place the word bank words, printing paper, cotton swabs, and small bowls of paint in the writing center. Students can practice writing word bank words, their name, and/or the alphabet with the unconventional writing materials. Students can also use the materials to draw or paint in open-ended ways.

PLAY TIPS

- Write out letters or word bank words on paper or sentence strips (tracing) for students who need additional support.
- Provide opportunities for students to paint freely with the cotton swabs.

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Fine and Gross Motor

Driving Nails

EZ.020.LA.1013

Activity Type:
Free Choice

Objectives:
Students will recognize uppercase and lowercase letters.
Students will create letters and words using hands-on, unconventional methods.

Students can further enhance their letter recognition and emergent writing skills through a hands-on, unconventional activity involving faux nails and letter and number patterns. In this activity, students will trace the outlines of letters and numbers by hammering or drilling faux nails into pre-printed patterns on paper or soft foam boards. This tactile experience not only allows students to engage with letter and number shapes in a creative, interactive way but also offers a valuable opportunity to develop fine motor skills, hand-eye coordination, and spatial awareness. Through additional discussion, this activity can help students understand how drilling is used in the search for valuable resources, while also reinforcing their letter and number recognition skills.

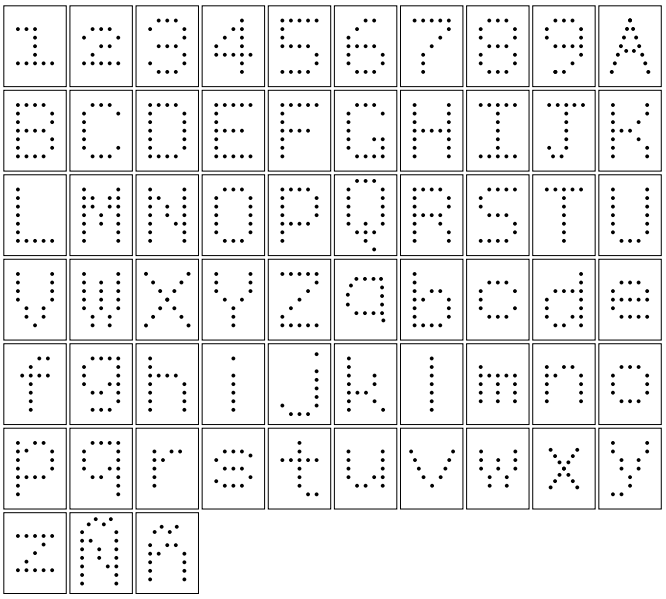
WHAT TO DO

Provide students with the pound-a-pattern set, number, and alphabet templates. Students can use the hammer and nails to follow the patterns on the template, or they can create their own pattern by using blank paper.

PLAY TIPS

- You can draw (or students can draw) additional patterns to use with the pound-a-pattern set. Students can even trace their favorite picture or image from another book to use with the set.
- Exploratory drilling involves companies boring into the earth to find natural gas and crude oil deposits, both underwater and underground. To connect this concept to the petrochemical industry, provide students with a faux drill that they can use to “drill” into materials, creating letters and numbers as they explore the process of drilling in a hands-on way.

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Science

Fossil Rubbings

EZ.020.LA.1014

Activity Type:
Free Choice and Small Group

Objectives:
Students will describe, discuss, and identify features and characteristics.
Students will explore and create sensory art while learning about fossilization.

Fossils are imprints left from organisms in substances like sediment, ash, and oil. They can range in size from very large to microscopic, with some only visible under the microscope. In the classroom, children can create their own fossils by pressing natural and man-made objects into modeling clay or using rubbing plates. This activity not only sparks creativity but also helps students develop a deeper understanding of the fossilization process.

WHAT TO DO

1. Ask students if they know what fossils are. Show them photos of fossils and explain that fossils are the remains of plants and animals from long ago. These remains leave imprints in soil and rock.
2. Provide each student with a ball of modeling clay. Instruct them to roll, soften, and flatten the clay (making associations to sediment). Then, ask students to press an object into the clay, wait a few seconds, and remove the object. Encourage them to describe the imprints they see in the modeling clay.
3. Set up rubbing plates, crayons, and paper in the writing center or free-choice center. Students can place paper over a plate and move a crayon back and forth across the paper. Ask them to describe how it feels as they draw (e.g., "It feels bumpy") and to look closely at their drawings, sharing any details they notice.

PLAY TIPS

- Try using salt dough as a mold. To make salt dough, combine 1 cup salt and 2 cups flour. Slowly add 1 cup water until the dough is thick. Press an object into the dough to make an imprint and then remove. Make comparisons between the salt dough and modeling clay.
- Make a cast fossil. Lightly press an object into the modeling clay and fill with glue. After 24 hours, pull the dried glue off and make observations about the cast model.
- Encourage students to add details to their fossil rubbings. Students can add background images or habits to insect, leaf, and flower images.

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Fine and Gross Motor

Following Directions

EZ.020.LA.1015

Activity Type:
Free Choice and Small Group

Objectives:
Students will follow a series of steps to make a product.
Students will develop fine motor skills.

Young children learn language by listening to the world around them. With increased exposure, they begin to comprehend and build understanding. Using concept cards, building materials, and adult guidance, students participate in following directions exercises to make a product.

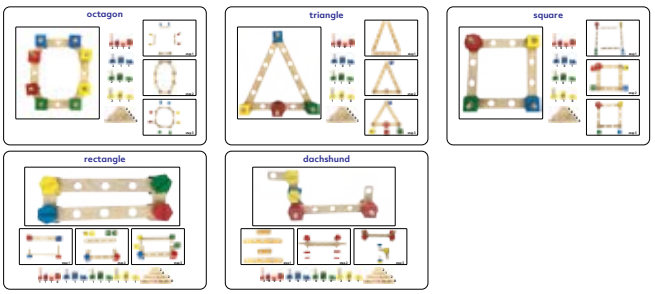
WHAT TO DO

Introduce the construction building set and the concept cards in a free exploration area. Students can use the concept cards to create a pre-determined product, or students can build items/structures of their choosing.

PLAY TIPS

- Students can practice following directions through other listening exercises. Provide students with a series of directives to create a specific product using tabletop blocks. For example, ask students to stack two cylinders and a triangle to create a rocket, modeling as you provide the directives.
- Games like *Simon Says* and *Red Light, Green Light* help students practice following directions. Although students are not creating a visible product, they are listening to directions to complete a task.

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Science

Heat Energy

EZ.020.LA.1016

Activity Type:
Free Choice and Small Group

Objectives:
Students will describe common sources of energy.
Students will observe physical changes that occur from heat energy and transfer of heat.

Heat energy is often called thermal energy. Thermal energy is present in the molecules of an object. When an object is hot, the molecules have a lot of energy and move fast. When an object is cold, the molecules have little energy and move slowly. Heat always moves from one object to another; this process is called heat transfer. Young children can view this transfer through the physical changes that result from it. Everyday experiences, like the sun making us warm and steam rising from a pot of boiling water, help young children see how heat works. In the classroom, children can have fun exploring tools and activities related to heat to reinforce these concepts.

WHAT TO DO

1. Introduce the color-changing touch boards and invite students to place their hands on the surface. Encourage them to describe what they observe as they move their hands across the board. Explain that the changes they see are due to the transfer of heat from their hands to the board.
2. Explore other activities to demonstrate heat transfer, such as melting ice cubes, sorting 'hot' and 'cold' items, and experiencing warmth from the sun.
    - Ice Cube Melt: Have students hold an ice cube and observe how it melts in their hands. Discuss how the heat from their hands is transferred to the ice, causing it to change from solid to liquid.
    - 'Hot' and 'Cold' Sorting: Provide various objects like a metal spoon, plastic cup, blanket, and rock. Ask students to quickly sort the items based on whether they think they feel 'hot' or 'cold' and then test their predictions.
    - Sun Warm-Up: Have students sit in a sunny spot and feel the warmth of the sun on their skin. Discuss how the sun's rays transfer heat to their body.

PLAY TIPS

- Use a magnifying glass to focus sunlight and feel the warmth, demonstrating radiation.
- Conduct experiments with different materials to see which ones get warm quickly (conduction).
- Create a hot air balloon using a plastic bag and warm air to demonstrate convection.

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Fine Arts

When I Grow Up

EZ.020.LA.1017

Activity Type:
Small Group

Objectives:
Students will identify similarities and differences between themselves, classmates, and others.
Students will recreate stories through dramatic representations.

As adults, we help increase children's awareness of a wide variety of careers and jobs by drawing their attention to people performing different roles in the community where they live. Through books, conversation, and dramatic expression centered around community jobs, children use career-related vocabulary and build background knowledge. This can help them identify personal interests and make connections with their peers. Teachers and other adults can model curiosity about the work of others by asking questions such as, "What do you think a (chef, artist, geologist, etc.) does all day?" and "How do you think it feels to be a (chef, artist, geologist, etc.)?" This approach not only broadens children's understanding of the world of professions but also encourages them to imagine their own future.

WHAT TO DO

1. Read books about careers, jobs, and the petroleum industry, focusing on the tools and equipment necessary to do a specific job. Reiterate the importance of different jobs and how they contribute to a community. Ask students to imagine themselves in a career.
2. Focus on the petroleum industry process by providing items that represent those respective occupations (exploring, extracting, refining, transporting, and marketing). You may not use those terms with young students, but they can begin to understand terms like explore, remove, clean, transport, and sell.

PLAY TIPS

- Add water or soil to a sensory bin and encourage students to clean the rocks using a sifter.
- Ask family members and other community members to share their job experiences with the students.

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Science

Gravity Wall

EZ.020.LA.1018

Activity Type:
Free Choice and Small Group

Objective:
Students will make predictions, observations, and discuss scientific principles.

The properties of gravity are reinforced as students engage with a variety of hands-on materials, such as pipes, balls, pumps, and other manipulatives. These tools create an interactive learning environment where students can observe and experiment with the effects of gravity in a tangible way. Students can test how objects of various sizes, weights, and shapes behave when subjected to the same gravitational pull. Students are not only learning about gravity but also thinking about how different forces and objects interact with a system.

WHAT TO DO

Encourage students to explore and experiment with the provided materials, including pipes, balls, an air pump, pegs, and more. As they investigate, prompt them to observe closely and reflect on their discoveries. Guide their attention to key factors such as the tube's angle and the size, weight, or shape of moving objects. Expand their exploration with engaging activities like rolling different objects through the tubes, adjusting air pressure, and changing pipe angles to observe the effects. Use the colored pegs to design images on the pegboard or create a maze for objects to navigate.

PLAY TIP

Explore gravity in other ways in the classroom using simple materials. Tie several paper clips to separate strings, then tie each string onto a pencil or stick. Lift the pencil up so the paperclips hang from the string. Ask students to move the stick around and describe what they notice (the paperclips always point to the ground). Explain that gravity pulls objects toward the Earth. Students can explore with magnets to see how other forces (magnetism) can overcome gravity.

WHAT YOU'LL NEED







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Science

Oil and Water

EZ.020.LA.1019

Activity Type:
Free Choice and Small Group

Objective:
Students will make predictions, observations, and have discuss scientific principles.

Petroleum, also known as rock oil, is a fossil fuel that comes from the remains of plants and animals that lived millions of years ago. These remains were buried under layers of sand and rock, where heat and pressure transformed them into petroleum. Students can explore the properties of oil through hands-on experiments and observations.

WHAT TO DO

1. Ask students to place a jar inside a dish tub. Fill the jar to about three-quarters full of water, then add a few tablespoons of oil and several drops of liquid color. Secure the lid tightly on the jar and have students shake it. Encourage them to observe and discuss the results by asking questions like, “What do you notice as you shake the jar?” and “How does the oil interact with the water?”
2. Introduce additional materials such as confetti, glitter, or small objects. Use these to explore and observe how concepts like viscosity, density, and motion work.

PLAY TIP

Reinforce scientific principles using the discovery tubes. Make observations about the changes as you manipulate the tubes and use science-related vocabulary such as sink, float, repel, buoyancy, and gravity.

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Science

Exploring Sound Waves

EZ.020.LA.1020

Activity Type:
Free Choice and Small Group

Objective:
Students will use simple scientific tools to learn more about sound.

Seismology involves special tools that help people figure out what's under the ground. It uses sound to bounce off rocks deep below the Earth's surface. When the sound hits a rock, it bounces back, and special machines listen for it. Scientists called geologists look at the patterns in the sounds to find places where there might be oil or gas. Young children can learn about sound by trying fun experiments, such as making string telephones or listening to sounds through different materials. This helps them see how sound moves and how vibrations travel through things.

WHAT TO DO

1. Pair students up and give each pair a tin can telephone. Ask them to stand apart so the string is taut. Encourage them to take turns speaking and listening through the tin cans or cups. Let them experiment with the sound by pulling the string tight while speaking and then loosening it when they speak again. Ask questions like, "How does the sound travel from one cup to the other?," "What happens to the sound when you change the string?," and "How does the string feel when you talk into the cup?"
2. Help students create their own telephones by poking a hole in the bottom of two cups and threading a piece of string, at least 5 feet long, through each hole. Tie a paper clip to each end of the string to keep it from slipping out and tape the clips securely inside the cups. Once they've made their phones, encourage students to use them just like the tin can telephones and compare the sounds they hear.

PLAY TIPS

- Go for a 'sound walk,' where students close their eyes and carefully listen to different sounds around them (birds chirping, trees swaying, footsteps, etc.). Stop every few minutes to discuss the types of sounds they hear and how the sounds change depending on the location.
- Fill several glasses with different amounts of water. Tap each glass with a spoon to observe the different sounds they produce. Discuss how the sound changes based on the amount of water in the glass.

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Science

Petrochemical Sensory Exploration

EZ.020.LA.1021

Activity Type:
Free Choice

Objective:
Students will interact with sensory materials to engage the five senses.

Open-ended sensory exploration fosters creativity, self-expression, and imagination, while offering children the chance to succeed, regardless of their language proficiency or cognitive abilities. This hands-on approach supports developmental growth by encouraging problem-solving, critical thinking, and sensory awareness. In addition, the materials provided for the classroom Wet Lab Sensory Table, such as play dirt, large rocks, agate slices, and a variety of rocks and minerals, enhance tactile learning and engagement. These materials promote sensory discovery and offer opportunities for children to explore textures, shapes, and patterns, enriching their understanding of the world around them.

WHAT TO DO

Pour the faux dirt into the Wet Lab Sensory Table and add the rocks, minerals, fossils, and agate slices. Create a variety of play-based scenarios, like: excavating rock formations and agate slices, sorting fossils, and loading rocks into the construction trucks.

PLAY TIPS

- Make your own taste-safe dirt by combining cocoa powder, water, and flour. Mix 2 tablespoons of cocoa powder and 1 cup of flour in a container. Slowly add 1 cup of water and mix.
- Add several PVC pipes or pieces of cut cardboard to allow students to freely explore and investigate the movement of objects (agate slices, play dirt, and rocks) on ramps.

WHAT YOU'LL NEED













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