Amazon Adventure

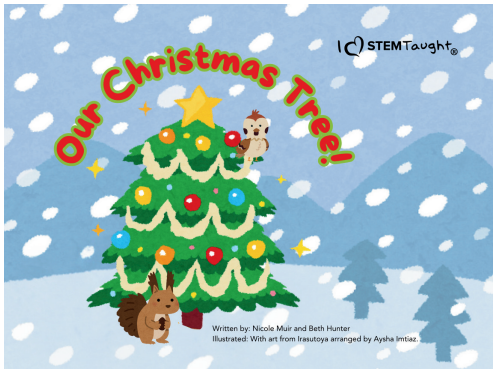
Day 4

TK-3RD GRADE

READING TIME
(10 min)

READ 'OUR CHRISTMAS TREE'

Read the STEMTaught story with your students. Lead a class discussion and get students excited about the many different kinds and shapes of trees and their leaves.

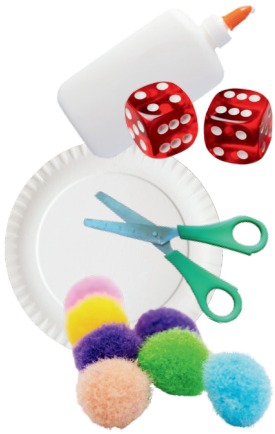


COUNT+PLAY
(60 min)

MAKE A CHRISTMAS TREE AND COUNT ORNAMENTS

Materials:

- Paper plates
- Glue + scissors
- Dice
- Pom-poms or other material



Objective:
Students make a cone-shaped Christmas tree and do a simple math activity to decorate it. Then, they get to play fun games with their tree.

What you'll do:
1. Say: **Today we get to make and decorate our own trees!** Each student gets a paper plate. Help them draw a wedge and cut it out.
2. Students color their plate green (or you can use paint later once the cone shape is made). Help students tape the cut plate in a cone shape.

Say: **Many fir and evergreen trees are shaped like cones. This helps snow slide off of their branches in winter.**

3. If you are planning to use paint, try to put the tape inside.
4. Students roll their dice three times and add the numbers. Then, they glue the corresponding number of pom-poms. For example, if they roll a 2, 5, and 3, they get to glue on 10 pom-poms (or make paper ornaments)

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COUNT+PLAY
(Continued)

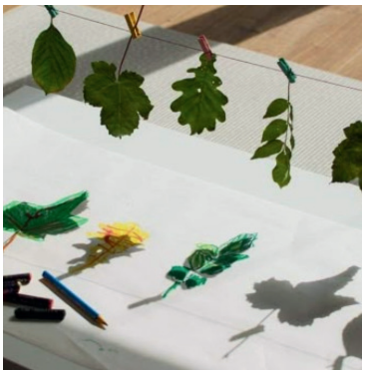
The completed Christmas trees will look a lot like party hats! Here are some games you can play with them.

Tree-top balance walk: Balance the cone on your head and walk across the classroom or yard. The one who gets farthest wins!
Toss and catch: Students work in pairs and use a leftover pom-pom or small ball. One student throws it to the other student who tries to catch it in their cone. See how many you catch in a row.

STEM TIME
(60 min)

Materials:

- Crayons and paper
- Collected leaves
- Tape



MAKE LEAF SHADOW ART

Say: **Have you ever noticed how sunlight coming through tree branches and leaves makes unique patterns? Today, we will collect different-shaped leaves and make our own leaf shadow art!**

What you'll do:

1. Students go outside on a nature walk and collect different shaped leaves. Encourage them to look for leaves that have already fallen
2. Ensure students have a place to work where there is sunlight. They may need to experiment with different angles and holding up or sticking the leaves so that there is a shadow on the paper. . Let them move around to find the perfect spot.

Ask: **Does anyone know how shadows are formed?** Example: **Light travels in a straight line. When something gets in the way, it blocks some of the light. The blocked light makes a shadow.**

3. Students use the shadow and crayons to trace the outline of the leaf. They can color the leaf. Let students include several leaf shapes if they wish to.
4. Encourage students to experiment with the position on the page.

Circulate and ask questions such as:

- **What happens if you move your leaf around?**
- **Is your shadow the same size as your leaf?**
- **Does the shadow of your leaf start to look bigger, stay the same size, or become smaller than the actual leaf?**

5. Throughout the day, students can visit their leaf art station (especially if the leaves have been suspended) and see if their shadow changes as the Sun moves by comparing their drawing.

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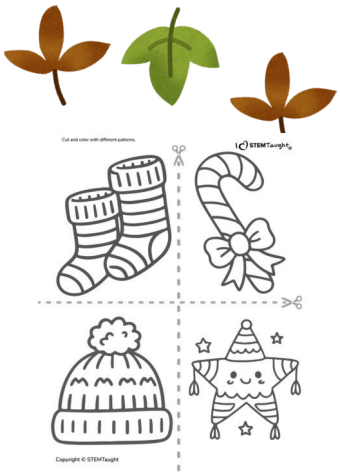
MATH ACTIVITY
(20 min)

Materials:
- Leaves from the previous activity or crayons to color



MAKE PATTERNS

Say: **Scientists love looking at materials to sort them into piles and look for patterns. A pattern is something that repeats again and again, like red, green, red, green Christmas lights, big, small, big, small pinecones, or circle, star, circle, star cookies on a tray!**

1. Draw on the board or arrange a few patterns to show your students. For example, students stand in a line as 'boy/girl/boy/girl' or write the letters ABABAB. Call on student volunteers to share more patterns they can think of. They can use their shoes, materials in the room, crayons and erasers, or anything else easily available. Let students color their sheet with patterns.
2. Students use the leaves they collected or crayons. They work in groups to create patterns, such as a brown leaf, green leaf, brown leaf, or different sizes (big/small), types of leaves (pine needle/leaf), shapes (curvy/pointy) or direction (pointing up/facing down).

GAME TIME
(20 min)

REINDEER SQUAD

Say: **Can anyone think of an animal that we might see in forests during winter?** (Example: Owls, deer, rabbits, foxes).
Say: **Reindeer survive winter by being alert, fast, and great at finding food. Today, I'm the reindeer trainer, and you are my clever reindeer.**
Students watch this short movie about reindeer and their amazing winter adaptations.
Reindeer's Amazing Adaptations to Living in Snow | BBC Earth Kids
https://www.youtube.com/watch?v=itzQdTKak4w

Say: **Did you notice all the amazing adaptations reindeer have to survive? Here are three amazing things reindeer can do:**

1st: Reindeer can spread their toes out and walk on snow.
Pretend you're a reindeer walking up a hill with your toes spread out.
2nd: Reindeer can see in ultraviolet.
Cup your hands around your eyes like you're holding binoculars and pretend to search for food.
3rd: Reindeer can dance and prance around fast!
Lift your legs up high and march or skip around quickly.

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GAME TIME
(Continued)

REINDEER SQUAD (CONTINUED)

Instructions: Have the students stand in a circle. Stand in front of a student and call out a number (1-3) for one of the tricks. That student has to remember which number was associated with which action. If they are wrong, they have to do a star jump with their arms stretched out like antlers. Move on to the next player in the circle and think of a different action. Keep moving around the circle quickly till each student gets a couple of turns.

STEM GAMES
(60 min)

Materials:
- Balls/beanbags

PLAY DECEMBER-THEMED GAMES

Reindeer in the Middle

1. Organize students into teams of three.
2. Teams spread out. Students will stand in a row. The player in the middle is the reindeer.
3. The 2 players on the outside throw a ball or beanbag back and forth while the reindeer in the middle tries to get it. If the student in the middle gets it, the player that threw the ball/beanbag is the new reindeer in the middle.

Materials:
- Whiteboard
- Dry erase marker

Winter Tree Word Game

How many words can you create from the letters in “coniferous”?

1. Write the word coniferous on the board. Say: Coniferous trees stay green all year and make cones instead of flowers. Many Christmas trees, like pines, firs, and spruces, are coniferous, which is why they keep their needles through winter and look festive during the holiday season!
2. Ask the students to use the letters in the word to make new words. They will raise their hands to call out words for you to write on the board. They can only use the letters in the word. If there is a letter that appears twice in the word, they can be used twice.
3. Challenge them. Can they come up with 10 or 20 words? More?
4. Consider giving the group extra sand dollars if they get 25 words!

Here are some of the kinds of words students might make.

Coniferous: cone, firs, sour, four, coins, core, ones, surf, on, no, so, if, is, in, us, of, cone, core, sour, four, fire, sure, iron, corn, confer, senior, infer, score, for, scour, ounce, crane.

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STEM STORY + WORD GAMES

COUNT AND CREATE

MATH ACTIVITY

LEAF SHADOW ART

GAME TIME

METRIC

English Foundation 3.1 Demonstrating Interest in Literacy Activities

Demonstrate interest in and engagement with English-language literacy activities with increasing independence.

English Foundation 3.2 Participating in Read-Aloud Activities

Engage in read-aloud activities with English- language books and communicate about the content of the books.

Science Foundation 3.6 Growth, Change, and the Life Cycle of Living Things

Observe and explore growth and changes in humans, animals, and plants and communicate an understanding that living things change over time in size.

Math Foundation 1.2 One-to-One Correspondence

Count ten objects or more using one-to-one correspondence (one object for each number word).

Physical Development Foundation 1.8 Fine Motor Manipulative Skills

Demonstrate increased fine motor manipulation skills using hands and fingers with increasing competence and precision to interact with objects needed for daily life.

Math Foundation 2.7 Creating Patterns

Create a variety of repeating patterns (for example, AABBAABB, ABCABC) or recreate existing patterns using different objects.

Science Foundation 2.2 Light and Sound Waves

Explore and describe changes in the properties of light, and shadows by manipulating different objects and materials during play and collaborative investigations.

1-PS4-3.

Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.

Visual and Performing Arts Foundation 3.5 Engaging in Role-Play

Engages in role-play (representing a person, animal, or character) using a wider range of voices, movements, and gestures.

Visual and Performing Arts Foundation 4.4 Learning Basic Dance Skills

Respond to the instruction of more than one skill at a time in movement (such as turning, leaping, and turning again).

Physical Development Foundation 1.5 Jumping

Demonstrate increased ability in performing locomotor skills that build on (and go beyond) walking and running, including engagement in hopping, galloping, skipping, side-sliding, and leaping.

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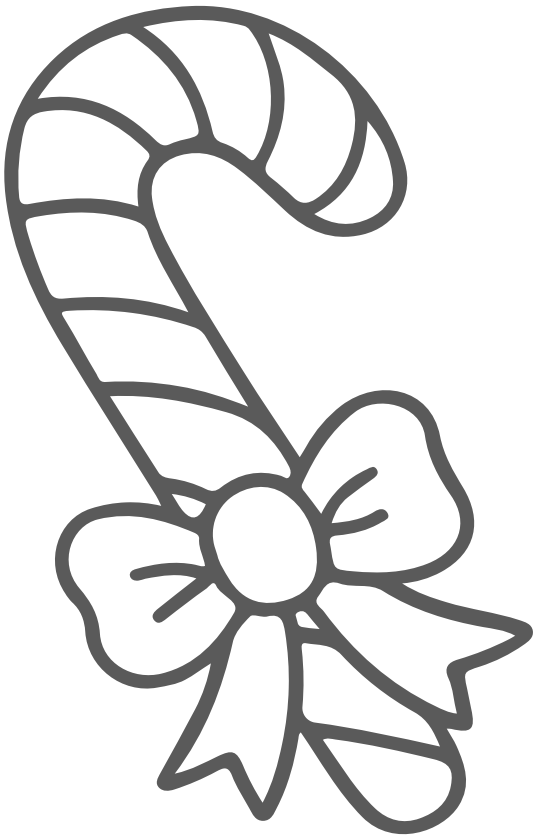
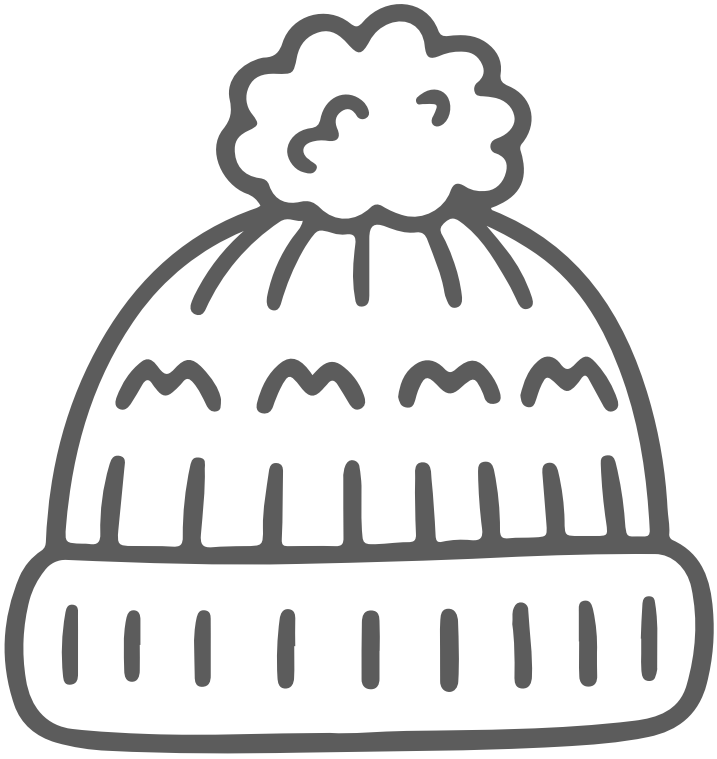
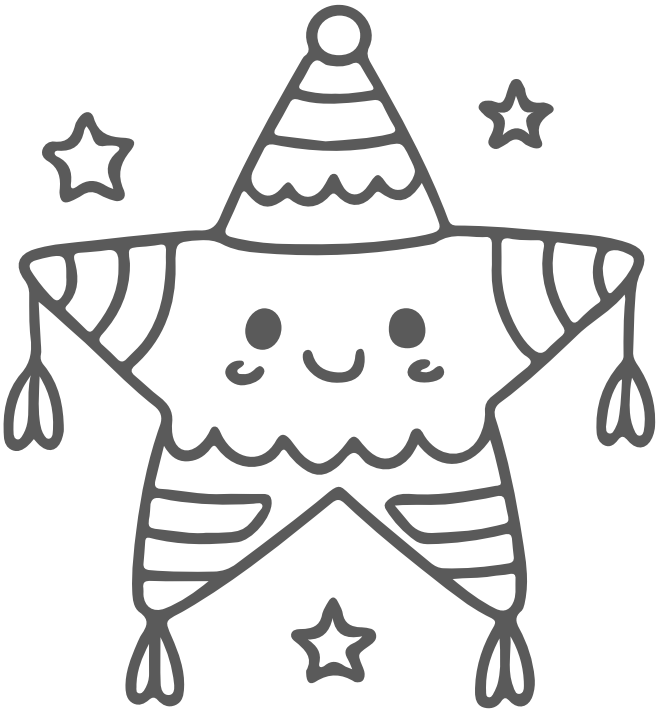
Cut and color with different patterns.

Amazon Adventure: Day 4







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