KINDERGARTEN SUPPLEMENT

Set C6  Geometry: 3-D Shapes in the World Calendar Pattern

Includes
February Calendar Pattern  C6.1

Skills & Concepts
★ identify and name cubes, cones, cylinders, and spheres
★ describe and compare three-dimensional objects in the environment
★ identify, describe, and extend repeating patterns
★ read aloud numerals from 0 to 31
★ identify ordinal positions through the 31st
Bridges in Mathematics Grade K Supplement
Set C6 Geometry: 3-D Shapes in the World Calendar Pattern

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Prepared for publication on Macintosh Desktop Publishing system.
Printed in the United States of America.
P0510

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Bridges in Mathematics is a standards-based K–5 curriculum that provides a unique blend of concept development and skills practice in the context of problem solving. It incorporates the Number Corner, a collection of daily skill-building activities for students.

The Math Learning Center is a nonprofit organization serving the education community. Our mission is to inspire and enable individuals to discover and develop their mathematical confidence and ability. We offer innovative and standards-based professional development, curriculum, materials, and resources to support learning and teaching. To find out more, visit us at www.mathlearningcenter.org.
Set C6 ★ February Calendar Pattern

3-D Shapes in the World

Overview
This set of Calendar Grid markers replaces the student-made markers in the month of February, and provides opportunities for kindergartners to recognize, name, describe, and compare spheres, cylinders, cubes, and cones as they appear in the world around us.

Skills & Concepts
- identify and name spheres, cylinders, cubes, and cones
- describe and compare three-dimensional objects in the environment
- identify, describe, and extend repeating patterns
- read aloud numerals from 0 to 31
- identify ordinal positions through the 31st

You’ll need
- Calendar Grid pocket chart
- Month and Year Calendar Grid cards
- February 3-D Shapes in the World Calendar Markers (available at http://gotomic.org/calmarkers) Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.
- 3-D Shapes Labels (pages C6.6 & C6.7, see Advance Preparation)
- 4 pieces of 18" × 24" chart paper (see Advance Preparation)
- helper jar containing a popsicle stick for each child with his/her name on it
- square and triangular polydrons
- Cubes, Cones, Cylinders & Spheres by Tana Hoban (optional)

Advance Preparation Run 1 copy of the shapes labels. Cut them apart, and glue each one to the top of a piece of 18" × 24" chart paper. Post the 4 charts near your calendar display area.

Introducing the 3-D Shapes in the World Calendar Grid Pattern
Open your first Number Corner lesson in February by directing students' attention to the calendar grid. Place the first marker in the correct pocket, and ask children to pair-share observations.
What do they notice about this marker? After a few moments, pull sticks from your helper jar to call on children to share their observations with the class.

*Students*  A soccer ball! I have one like that!
Me too!
I’m really good at soccer—it’s my favorite!

*Teacher*  What shape is the soccer ball?

*Students*  It’s round, like a circle!
It can roll.
A real soccer ball is round all the way around, so it can roll.

After the children have had a chance to share some of their observations, explain that the calendar markers this month will feature several different three-dimensional shapes. Have students look at the shapes charts you have prepared. Read the name of each shape to the class, and ask students to identify the one that matches the shape of the object on the first marker.

*Students*  It’s a sphere! The picture on Marker 1 is a sphere!
It’s a soccer ball, and it looks like a circle.
A sphere is kind of the same as a circle.

Now ask students to look around the room very quietly. Can they see other examples of spheres from where they are sitting? Ask them to raise a hand as soon as they spot something they think is a sphere. After a few moments, pull sticks from your helper jar to choose a few children to share their ideas with the class. As you call on each student, ask him or her to walk over to the object, point to it or bring it back to the discussion area if it is small, and explain how he or she knows that the object is a sphere.

*Students*  Here’s our playground ball. It’s round like the soccer ball.
I got a tennis ball from the recess basket. It’s a sphere because it’s round.
We have lots of those at my house.
This marble is from the marble roll set. It’s a little sphere because it’s round.
Repeat the process described above as you post the markers on the second, third, and fourth days of the month. Each of these markers features a different shape: a cylinder on the second, a cube on the third, and a cone on the fourth day. Take time to have students find examples of each of these shapes as each new marker is posted, and record their discoveries on the shapes charts.

**February Calendar Pattern (cont.)**

As the month progresses, work with the class to list additional examples of each shape on your charts. Summarize students' descriptions of each shape as well.
Here is a summary of the questions and prompts mentioned so far, as well as some others you might use through the month:

- Let's name the shape of the object on each marker.
- What shape do you think we’ll see on the next marker? Why?
- Can you find objects around the room that are spheres (cylinders, cubes, cones)?
- How can you tell if something is a sphere (cylinder, cube, cone)?
- What is the difference between a cylinder and a sphere (a sphere and a cube, a cone and a cylinder)?
- What shape do you see on the 4th (9th, 15th, 25th) marker?
- I see a marker on the calendar grid that has a picture of something shaped like a sphere. This sphere is orange, and it’s something you play a game with. Which marker am I thinking of?
- What shape do you predict we’ll see on the 23rd (25th, 28th, 30th) marker? How do you know?
- Is there a pattern in the markers this month? If so, what is it? How do you know it’s a pattern?

Extensions

- Work with the class to create a display for each of this month’s featured shapes by gathering objects from around the classroom and bringing examples from home.
- Choose one shape each week as the focus of a school-wide shape search. Encourage students to look for examples of the shape on the playground, the gym, the library, the cafeteria, and so on. Consider snapping photos of some of the better examples to add to your shapes charts in class.
- Challenge children to build each of the shapes featured this month with polydrons, blocks, or other construction materials (e.g., legos, construx, tinkertoys, and so on). Is it possible to build a sphere, a cylinder, or a cone with polydrons? Why or why not? What about a cube? What is the largest cube students can build with the collection of polydrons in your classroom?
- Share *Cubes, Cones, Cylinders, & Spheres* with your class sometime during the month. In this wordless book, photographer Tana Hoban identifies four three-dimensional shapes before showing each in contexts that are familiar to many children (alphabet blocks, ice cream cones) as well as contexts a child might encounter on a trip to the city, country or even Fantasy Land (traffic cones, bales of hay, a castle).
NOTE  Below is a representation of the February calendar grid. The full-size calendar markers are available at http://gotomic.org/calmarkers.

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</table>
3-D Shape Labels page 1 of 2

cylinder

cone
3-D Shape Labels page 2 of 2

sphere
cube
Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.

February 3-D Shapes in the World Calendar Markers  Sheet 1 of 16

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2  

CRUNCHY PEANUT BUTTER
Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.

February 3-D Shapes in the World Calendar Markers  Sheet 2 of 16
Print 1 copy of the calendar marker sheets, preferably in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.

February 3-D Shapes in the World Calendar Markers  Sheet 3 of 16

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February 3-D Shapes in the World Calendar Markers  Sheet 5 of 16

9  10
February 3-D Shapes in the World Calendar Markers  Sheet 6 of 16
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February 3-D Shapes in the World Calendar Markers  Sheet 7 of 16
February 3-D Shapes in the World Calendar Markers  Sheet 8 of 16

- Image of a box labeled "MR. SMITH"
- Image of a tomato plant on a trellis

15
16
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February 3-D Shapes in the World Calendar Markers  Sheet 9 of 16

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February 3-D Shapes in the World Calendar Markers  Sheet 10 of 16
February 3-D Shapes in the World Calendar Markers Sheet 11 of 16
February 3-D Shapes in the World Calendar Markers  Sheet 12 of 16

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24
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February 3-D Shapes in the World Calendar Markers  Sheet 13 of 16

25

26
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February 3-D Shapes in the World Calendar Markers  Sheet 14 of 16
February 3-D Shapes in the World Calendar Markers  Sheet 16 of 16