



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 3-D 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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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.

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Set C6 ★ February Calendar Pattern



CALENDAR GRID

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.

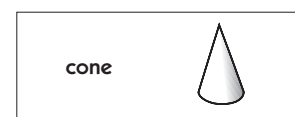
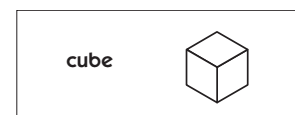
Skills & Concepts

- ★ identify and name spheres, cylinders, cubes, and cones
- ★ describe and compare 3-D 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://gotomlc.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)

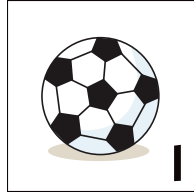
Advance Preparation Run 1 copy of the shapes labels. Cut them apart, and glue each one to the top of a piece of 18" × 24" chart paper. Post the 4 charts near your calendar display area.



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.

February Calendar Pattern (cont.)



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 3-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.

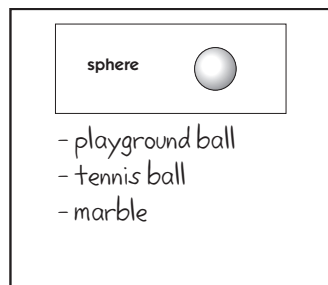
Now ask students to look around the room very quietly. Can they see other examples of spheres from where they are sitting? Ask them to raise a hand as soon as they spot something they think is a sphere. After a few moments, pull sticks from your helper jar to choose a few children to share their ideas 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.



February Calendar Pattern (cont.)













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.

sphere 	cylinder 	cube 	cone 
<ul style="list-style-type: none"> - playground ball - tennis ball - marble 	<ul style="list-style-type: none"> - water bottle - teacher's cup - marker pen - building block 	<ul style="list-style-type: none"> - wood cube - building block - toy box - Jay's polydron cube 	<ul style="list-style-type: none"> - toy clown's hat - water cup - cone from the gym - tip of Sara's pencil

Continuing through February with the Calendar Grid

Each day, have a helper point to the markers that have been posted in the pocket chart as the class names the shape of each object. Have children predict what the next marker will show before you place it on the chart. Once the new marker has been posted, ask students to share their observations.

Teacher *Let's say the shape of the object on each marker we've posted so far, and then make some predictions about what we'll see on the markers for Saturday, Sunday, and Monday. Brianna, will you point to the markers as we name the shape of each object?*

February						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	 1	 2	 3	 4	 5	 6
 7	 8	 9	 10	 11	 12	





Students *Sphere, cylinder, cube, cone; sphere, cylinder, cube, cone; sphere, cylinder, cube, cone... Ball next—it has to be! Maybe it'll be a baseball. My cousin plays baseball with me sometimes!*

Teacher *Talk with the person next to you about what shape we might see on the marker for Saturday. Put your thumbs up when you have an idea, and I'll pull sticks from the jar to pick children to share with the class.*

Students *It's going to be round. It's going to be one of those spheres. It should be a snowball 'cause of all the snow outside!*

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.

February Calendar Pattern (cont.)

<p style="text-align: center;">sphere </p> <ul style="list-style-type: none"> - playground ball - tennis ball - marble - basketball - golf ball - a purple grape <p>A sphere is round all the way around. It's like a ball. It rolls.</p>	<p style="text-align: center;">cylinder </p> <ul style="list-style-type: none"> - water bottle - teacher's cup - marker pen - building block - a jar - a pencil can <p>A cylinder is round in the middle. It is flat on the top and bottom.</p>	<p style="text-align: center;">cube </p> <ul style="list-style-type: none"> - wood cube - building block - toy box - Jay's polydron cube - a tissue box - Jack-in-the-box <p>A cube is square everywhere. It has 6 sides. It can't roll.</p>	<p style="text-align: center;">cone </p> <ul style="list-style-type: none"> - toy clown's hat - water cup - cone from the gym - tip of Sara's pencil - tip of a crayon - closed up umbrella <p>A cone is pointy at the top. It has a circle on the bottom. It rolls funny.</p>
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Here is a summary of the questions and prompts mentioned so far, as well as some others you might use through the month:




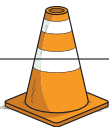
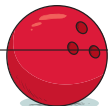

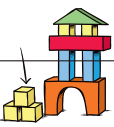





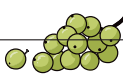
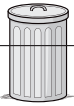

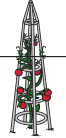

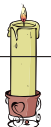





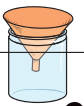


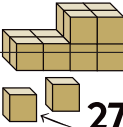



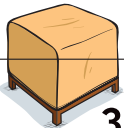
- Let's name the shape of the object on each marker.
- What shape do you think we'll see on the next marker? Why?
- Can you find objects around the room that are spheres (cylinders, cubes, cones)?
- How can you tell if something is a sphere (cylinder, cube, cone)?
- What is the difference between a cylinder 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

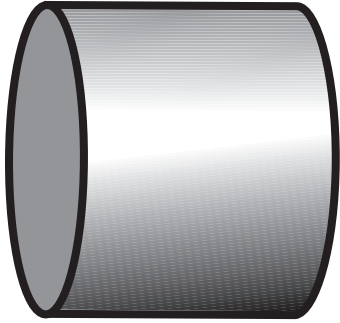
- Work with the class to create a display for each of this month's featured shapes by gathering objects from around the classroom and bringing examples from home.
- Choose one shape each week as the focus of a school-wide shape search. Encourage students to look for examples of the shape on the playground, 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 3-D 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).

February Calendar Pattern (cont.)

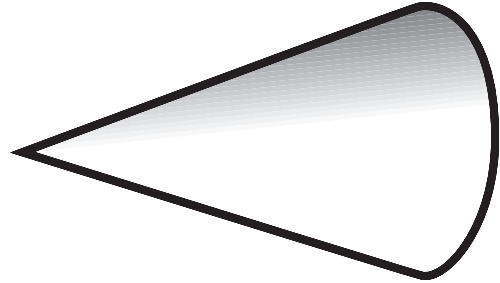
NOTE Below is a representation of the February calendar grid. The full-size calendar markers are available at <http://gotomlc.org/calmarkers>.

February						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	 1	 2	 3	 4	 5	 6
 7	 8	 9	 10	 11	 12	 13
 14	 15	 16	 17	 18	 19	 20
 21	 22	 23	 24	 25	 26	 27
 28	 29	 30	 31			

3-D Shape Labels page 1 of 2

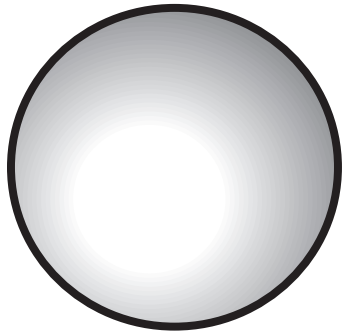


cylinder

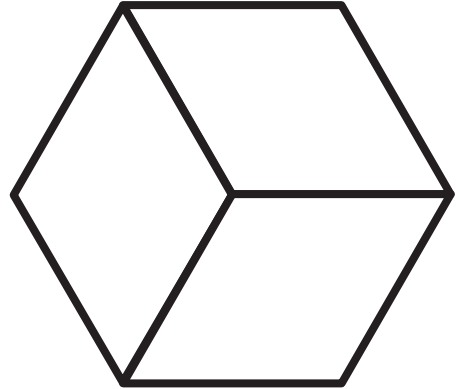


cone

3-D Shape Labels page 2 of 2



sphere



cube

