BRIDGES IN MATHEMATICS 1

GRADE 1 SUPPLEMENT

Set C7 Geometry: Describing 3-D Shapes Calendar Pattern

Includes

March Calendar Pattern C7.1

Skills & Concepts

- ★ identify, name, and describe 3-D shapes in isolation and in everyday situations
- ★ identify 3-D shapes based on defining attributes (such as number of faces and vertices), rather than descriptive attributes (such as color, size, or orientation)
- ★ identify, describe, and extend repeating patterns
- ★ read aloud numerals from 0 to 31
- ★ identify ordinal positions through the 31st

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P0510

Bridges in Mathematics Grade 1 Supplement
Set C7 Geometry: Describing 3-D Shapes 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 C7 ★ March Calendar Pattern

CALENDAR GRID

Describing 3-D Shapes

Overview

This set of Calendar Grid markers replaces the student-made markers in the month of March, and provides opportunities for first graders to identify, name, and describe 3-dimensional shapes including pyramids, cylinders, cubes, cones, rectangular prisms, and spheres.

Skills & Concepts

- ★ identify, name, and describe 3-D shapes in isolation and in everyday situations
- ★ identify 3-D shapes based on defining attributes (such as number of faces and vertices), rather than descriptive attributes (such as color, size, or orientation)
- ★ 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
- ★ March Describing 3-D Shapes Calendar Markers (available at **http://gotomlc.org/calmarkers**) Print 1 copy of the calendar marker sheets in color, single-sided, on white cardstock. Cut the calendar markers apart and laminate if desired.
- ★ Shape Labels (pages C7.7–C7.9, run 1 copy on paper and cut apart)
- ★ Calendar Grid Observations sheet from Set C2 (see Advance Preparation)
- ★ one object to match each of the shapes in the set of markers (see Advance Preparation)
- ★ helper jar containing a popsicle stick for each child with his/her name on it

Advance Preparation Erase the Calendar Grid Observations sheet from Set C2. Draw 5 columns. Label the columns at the top of the first sheet as shown below for use with this month's markers. Find an object that matches each of the 6 shapes that appear on the markers (e.g., a die or number cube, a can, a ball, a paper water-cooler cone, a metronome, and a block). Plan to leave these objects on display near the calendar grid all month long.

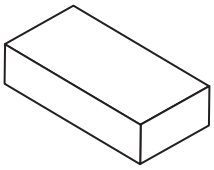
Calendar Grid Observations				
Date	Shape Name	Looks Like	Color	Other

March Calendar Pattern (cont.)

Introducing Describing 3-D Shapes Calendar Pattern

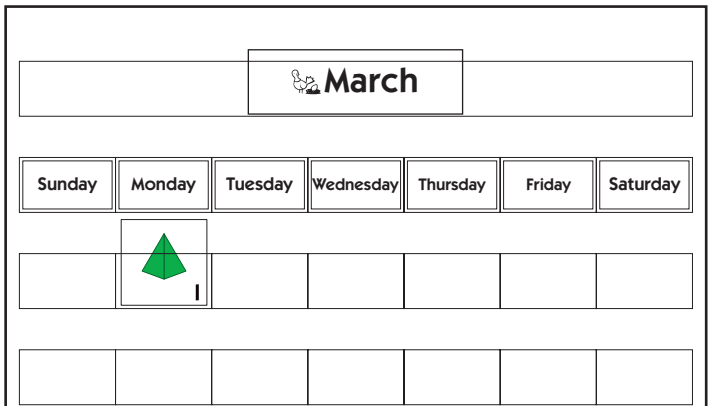
Open your first Number Corner lesson in March by explaining that this month's calendar pattern is going to feature 3-dimensional shapes. Set out the 3-dimensional objects you have collected near the calendar display board, where students can see them clearly. Ask the children to identify each object by shape name as you set it out.

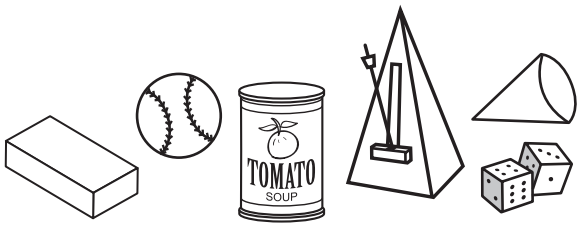
> ***Teacher*** *We are going to learn more about 3-dimensional shapes this month during Number Corner. I'm going to set out an example of each shape we'll see right here on the shelf next to the calendar grid. Let's work together to name the shapes as I set them out. Here's the first one.*



> ***Marco*** *That's one of the blocks from our block corner!*
>
> ***Teacher*** *That's right. Does anyone remember the name of this shape?*
>
> ***Eloise*** *It has rectangles on it.*
>
> ***Teacher*** *Let's look at each of the faces of this shape. Are they all rectangles? You're right, they are. Do you remember the name of the 3-dimensional shape that has 6 rectangular faces?*
>
> ***Max*** *It's a rectangular prism, I think.*

When you have set out all 6 objects, place the first calendar marker in the correct pocket. Ask children to find the object in your collection that matches the marker.

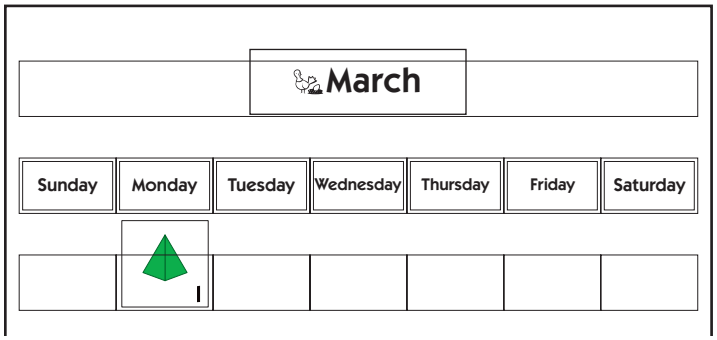




> ***Students*** *The shape on the first marker is the same as the music thing.*
> *It's a pyramid.*
> *That music thing is a metronome. My sister has one for her music lessons.*
> *It's like those pyramids in Egypt.*
> *It's really pointy on top.*
> *It has triangles on the sides.*

March Calendar Pattern (cont.)

Once they have identified the shape on the first marker by name, work with input from the students to fill in the first row on the calendar grid observation sheet. Students may not have much to write in the Other column. As more markers are added, they may begin to make observations about the size of the shape, its orientation, and its overall appearance.

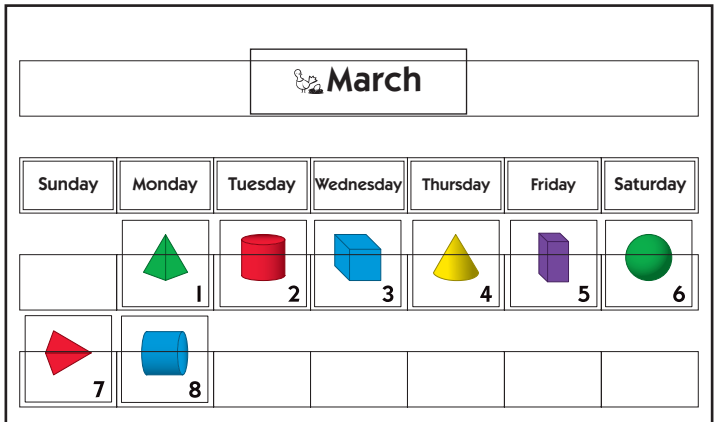


Calendar Grid Observations				
Date	Shape Name	Looks Like	Color	Other
1	Pyramid	a metronome	Green	

Continuing through March 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 each shape. Have children predict what the next marker will show before you place it on the chart.

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



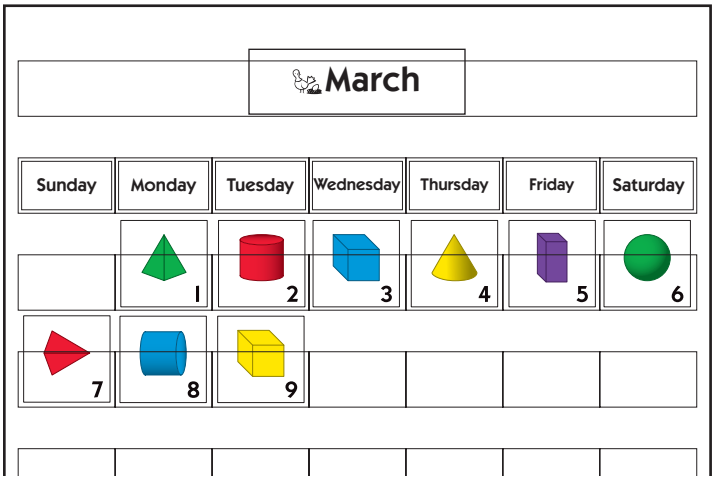
> ***Students*** *Pyramid, cylinder, cube, cone, rectangular prism, sphere; pyramid, cylinder.*

> ***Teacher*** *Talk with the person next to you about what shape we might see on the marker for today. 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*** *I think a cube because it's a pattern.*
> *First there's a pyramid and then a cylinder, and then comes the cube.*
> *There's also a color pattern. It goes green, red, blue, yellow, purple. I think it's starting over again, because we have green, red, blue already again. So the next one should be yellow.*
> *It'll be a yellow cube. I know it!*

March Calendar Pattern (cont.)

After students have shared some of their predictions, post the marker for the day. Ask students to share their observations, and work with their input to fill in the information on the calendar grid observations sheet. Once you have moved beyond the first 6 markers, challenge students to think of objects other than the ones in your collection to list in the last column.

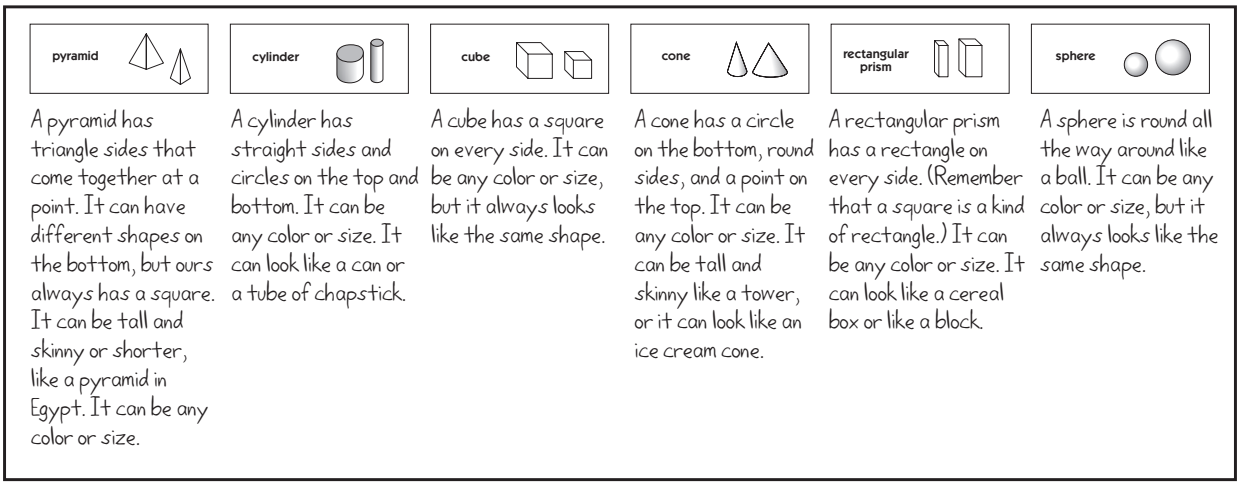


Calendar Grid Observations

Date	Shape Name	Looks Like	Color	Other
1	Pyramid	a metronome	Green	
2	Cylinder	a can	Red	
3	Cube	dice	Blue	
4	Cone	paper cup	Yellow	
5	Rect. Prism	a block	Purple	
6	Sphere	a baseball	Green	
7	Pyramid	Egyptian pyramid	Red	sideways
8	Cylinder	coffee cup	Blue	sideways
9	Cube	alphabet block	Yellow	the same

Students will probably notice that although markers 7 and 8 show the shapes from markers 1 and 2 turned on their sides, the cube on marker 9 looks just the same as the cube on marker 3, except for its color. Invite them to use blocks to test what happens if they turn a cube on its side. Why does it always look the same? They'll notice that the same thing happens with the sphere on marker 12. Later in the month, they will notice that the cube and sphere are again unchanged, although the other shapes get skinnier and are turned on their sides.

As students begin to explain how they can tell what kind of shape is shown on each marker, regardless of its color, orientation, or size, use the shape labels to create a chart with students that shows the defining attributes of each shape. They can refer to objects in the world to describe the different ways each shape can look.



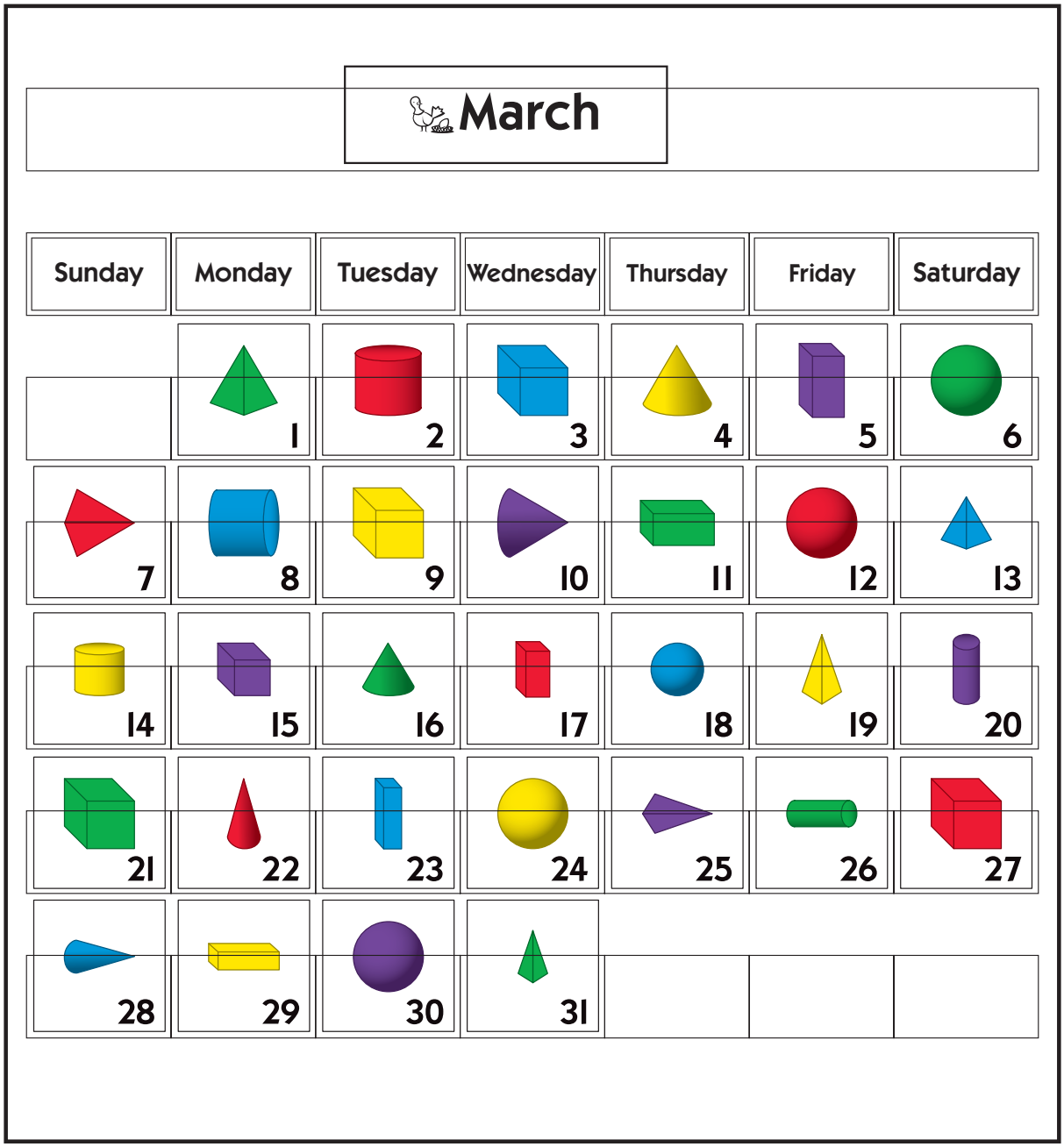
March Calendar Pattern (cont.)

Here is a summary of the questions and prompts mentioned so far, as well as some others you might use through the month:

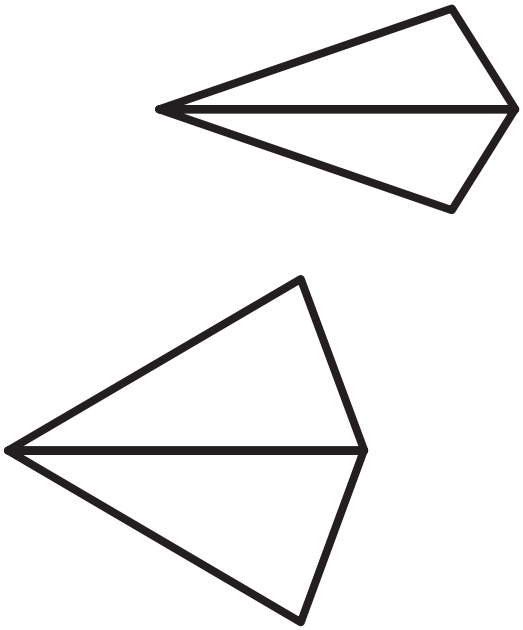
- Let's name the shape on each marker.
- What shape do you think we'll see on the next marker? Why?
- How do you know today's shape is a cube (cone, rectangular prism, sphere, pyramid, cylinder)?
- Can you see something else in our classroom that is shaped like a cube (cone, rectangular prism, sphere, pyramid, cylinder)? Let's see if we can find more examples around the school.
- How are the shapes on markers 2, 8, and 14 (or 3, 9, and 15; and so on) alike? How are they different?
- What shape do you see on the 3rd (5th, 9th) marker?
- Which of our calendar grid shapes will roll? Why? Which ones will not roll? Why not?

March Calendar Pattern (cont.)

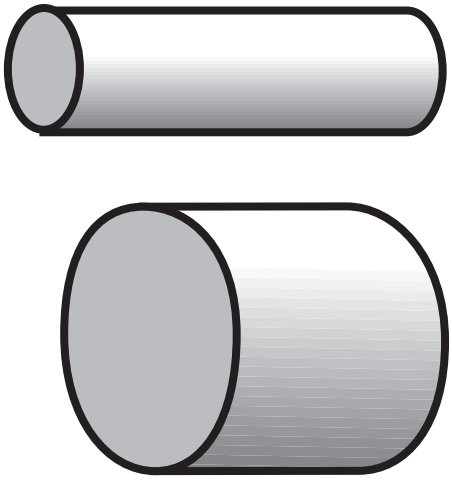
NOTE Below is a representation of the March calendar grid. The full-size calendar markers are available at **http://gotomlc.org/calmarkers**.



Shape Labels page 1 of 3

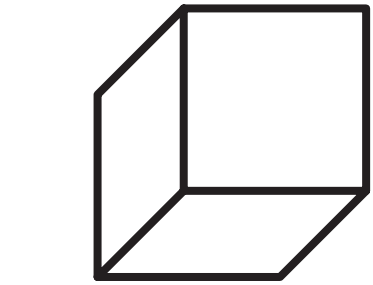


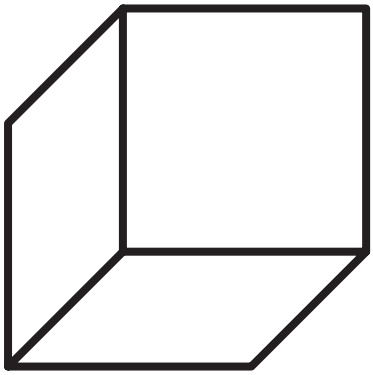
pyramid



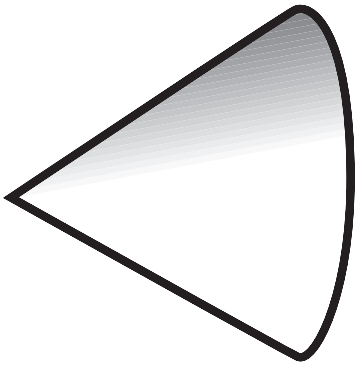
cylinder

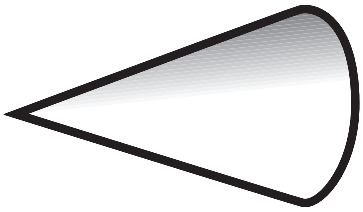
Shape Labels page 2 of 3





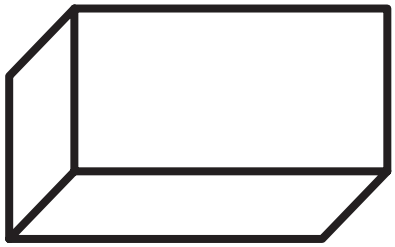
cube



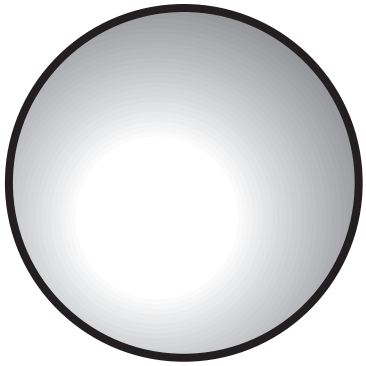


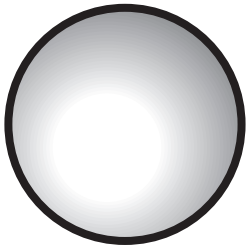
cone

Shape Labels page 3 of 3



rectangular prism

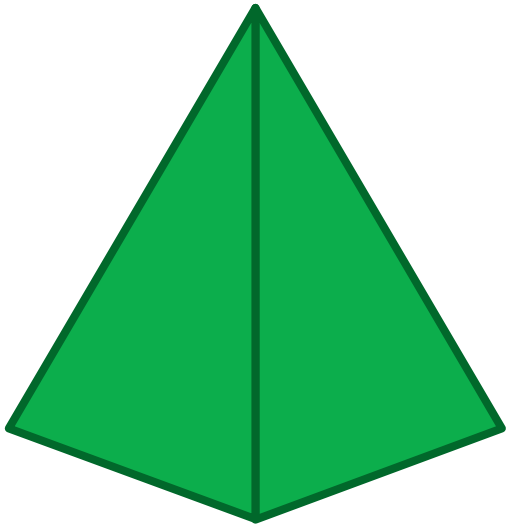




sphere

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

March Describing 3-D Shapes Calendar Markers Sheet 1 of 16



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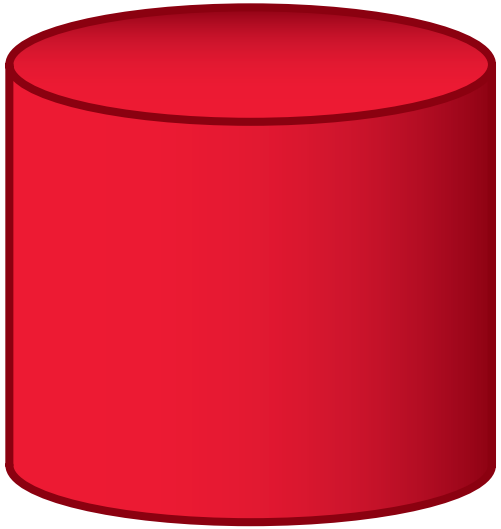

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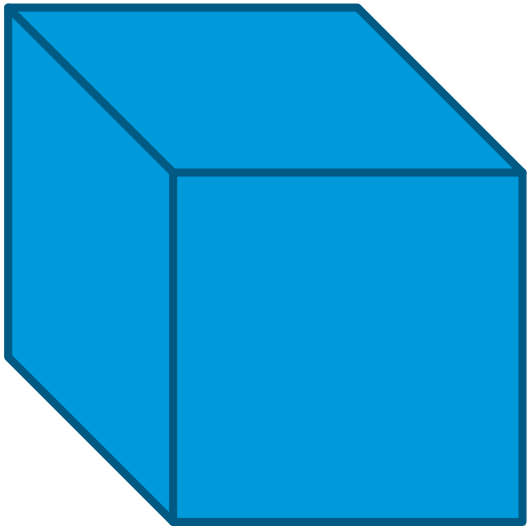
March Describing 3-D Shapes Calendar Markers Sheet 2 of 16



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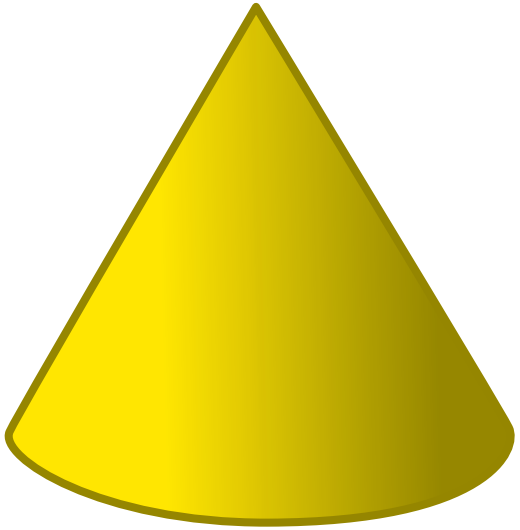

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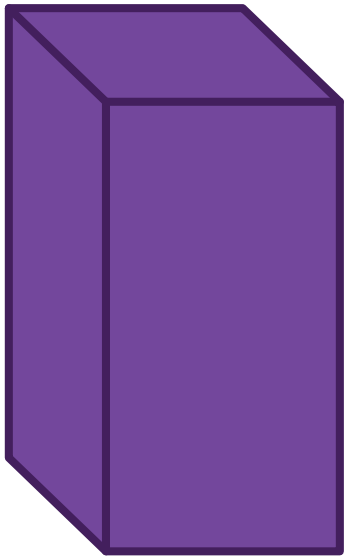
March Describing 3-D Shapes Calendar Markers Sheet 3 of 16



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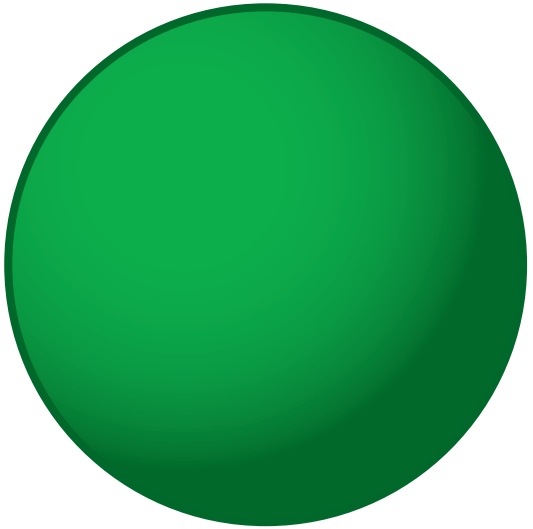

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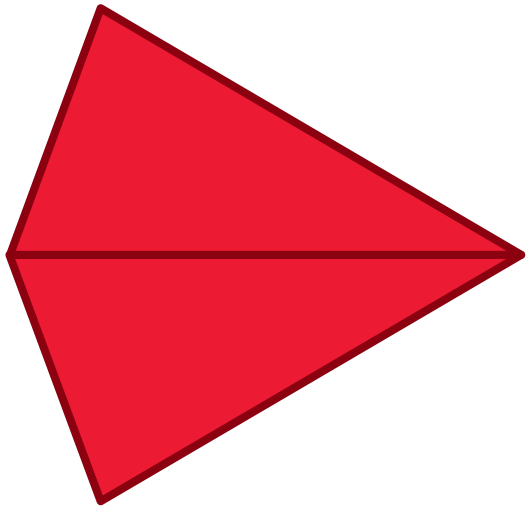
March Describing 3-D Shapes Calendar Markers Sheet 4 of 16



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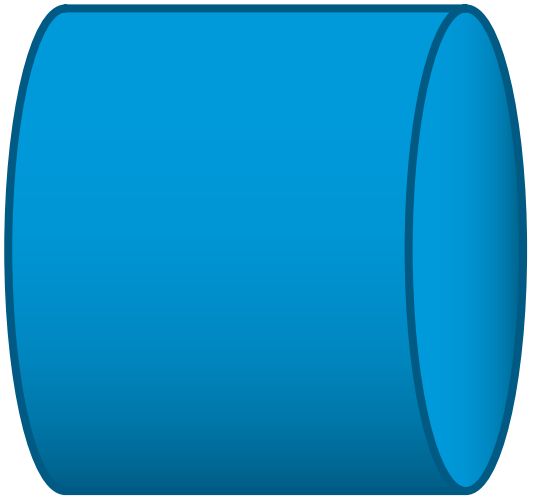

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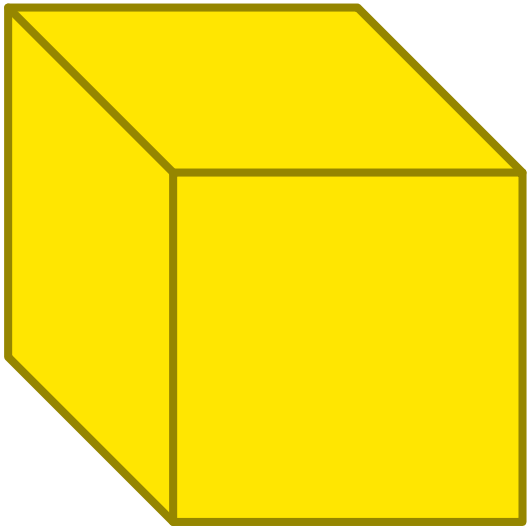
March Describing 3-D Shapes Calendar Markers Sheet 5 of 16



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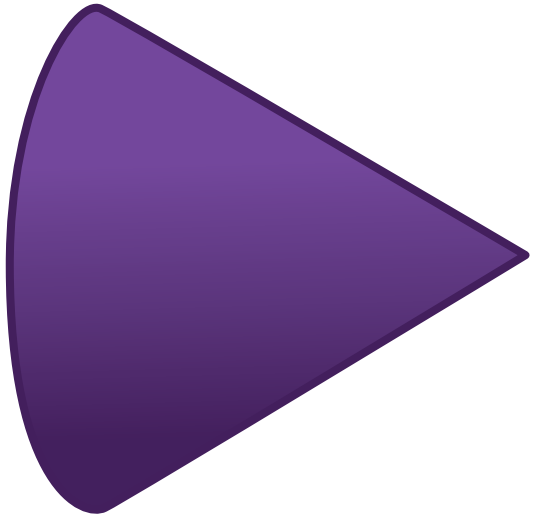

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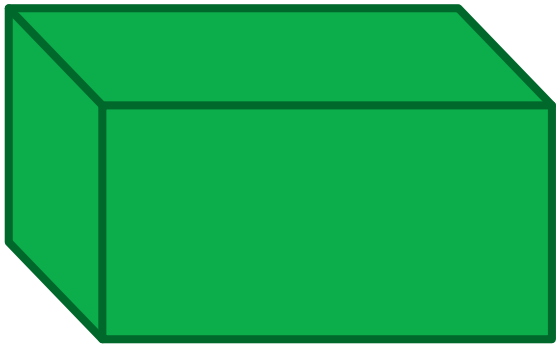
March Describing 3-D Shapes Calendar Markers Sheet 6 of 16



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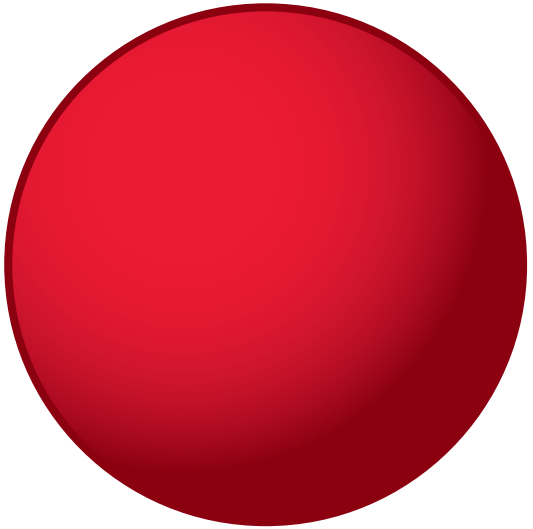

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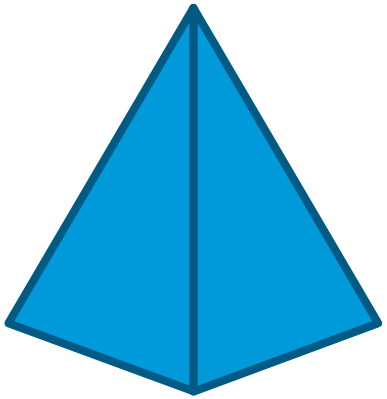
March Describing 3-D Shapes Calendar Markers Sheet 7 of 16



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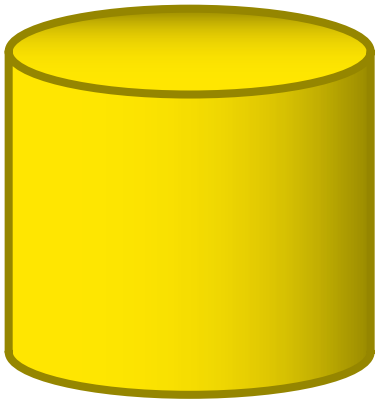

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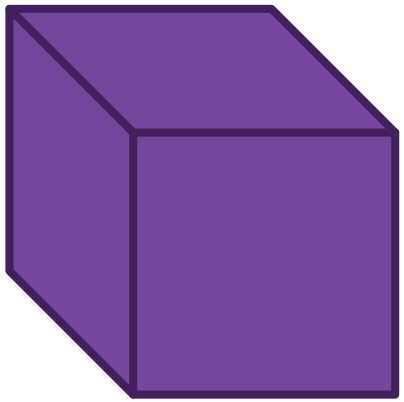
March Describing 3-D Shapes Calendar Markers Sheet 8 of 16



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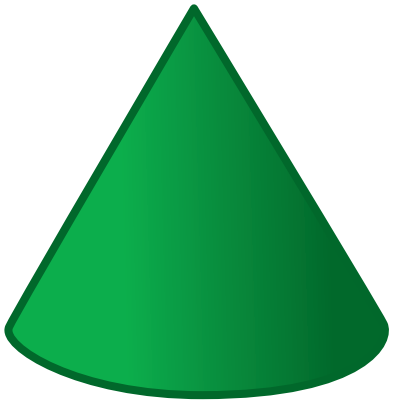

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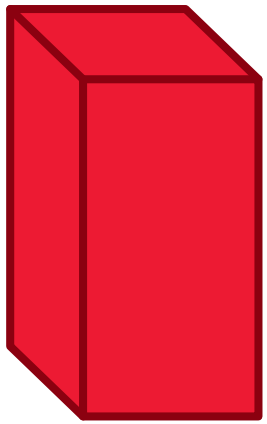
March Describing 3-D Shapes Calendar Markers Sheet 9 of 16



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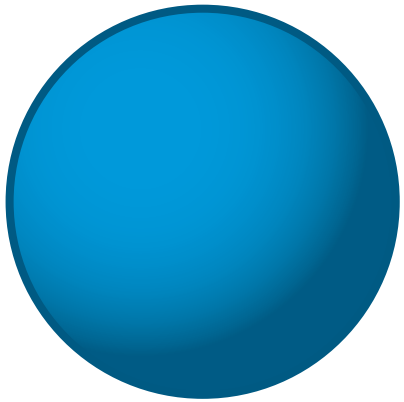

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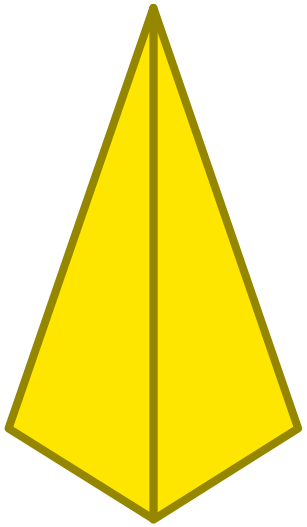
March Describing 3-D Shapes Calendar Markers Sheet 10 of 16



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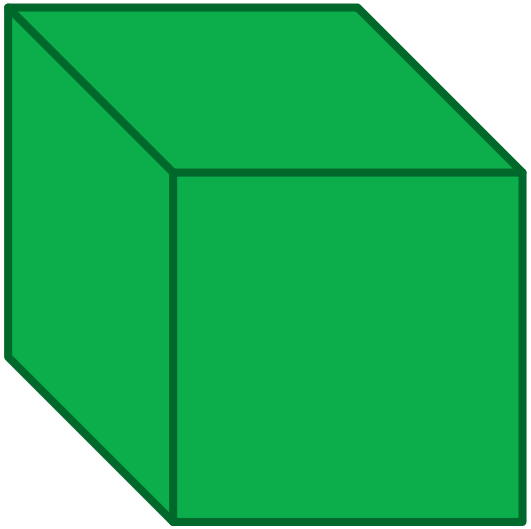
March Describing 3-D Shapes Calendar Markers Sheet 11 of 16



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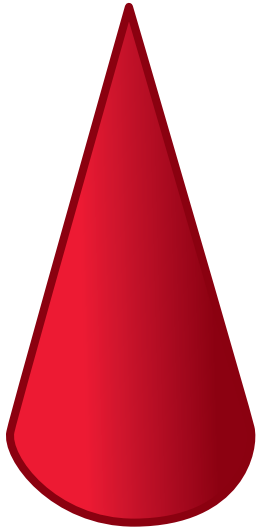

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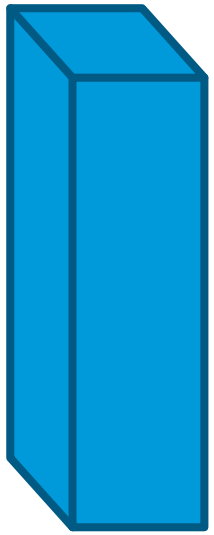
March Describing 3-D Shapes Calendar Markers Sheet 12 of 16



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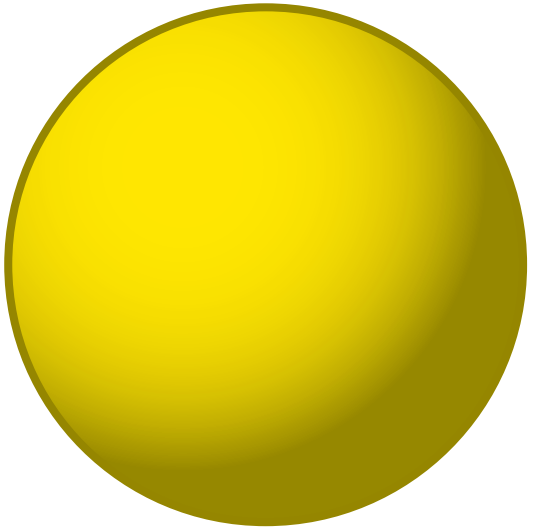
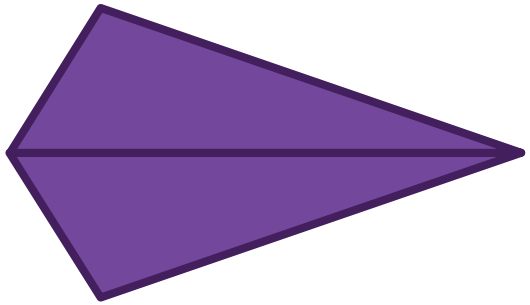


24

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

March Describing 3-D Shapes Calendar Markers Sheet 13 of 16

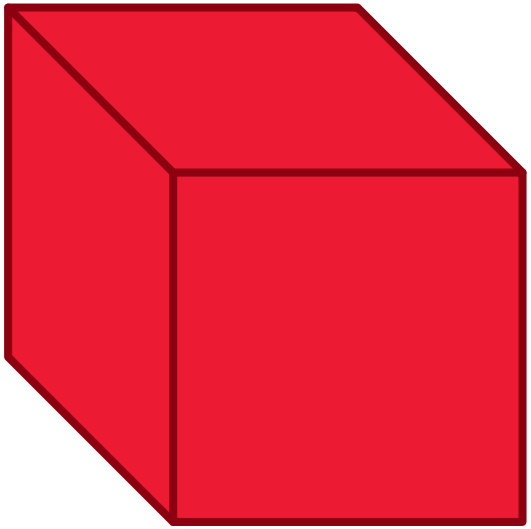


25

26

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

March Describing 3-D Shapes Calendar Markers Sheet 14 of 16



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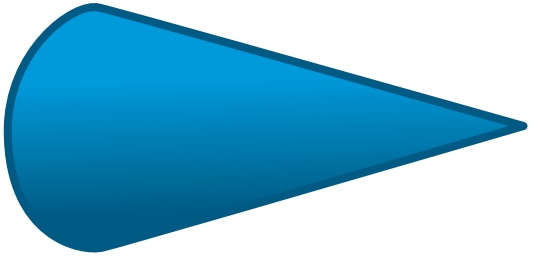
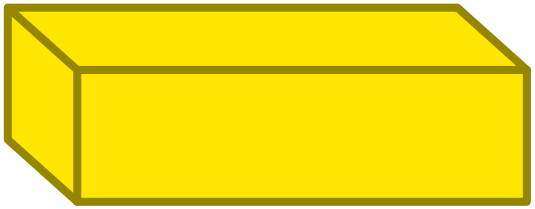


28

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

March Describing 3-D Shapes Calendar Markers Sheet 15 of 16



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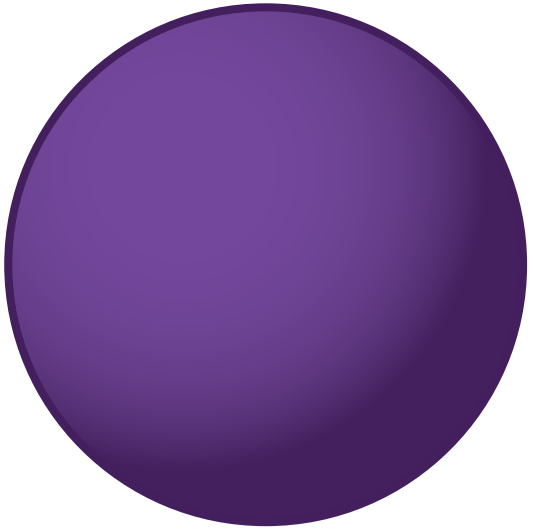
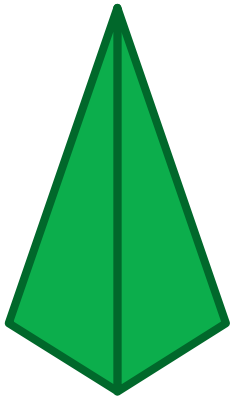


30

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

March Describing 3-D Shapes Calendar Markers Sheet 16 of 16



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