Day 01	Day 02	Day 03	Day 05	Day 06
Every Day Counts Update all Discuss • Calendar • Coin Counter	**Every Day Counts** Update all Introduce • new Daily Depositor (see p. 47) • Measurement (See "Discussion about Temperature on p. 49).	**Every Day Counts** Update All Discuss • Measurement • Counting Tape - Today's Number	**Every Day Counts** Update All Discuss • Daily Depositor • Measurement	**Every Day Counts** Update All Discuss • Calendar • Coin Counter
Whole Group Lessons Investigation 1, Session 1 • Quick Images: 10 Frames (p. 6, blackline on p. 202) *10 min.* • Shapes in the Classroom (p. 7) *15 min.* • Sorting Shape Cards (p. 7-8, read p. 12-13 also) *30 min.*	**Whole Group Lessons** Investigation 1, Session 1, cont. • Quick Images: 10 Frames *10 min.* • Making Shape Card Posters (p. 9) *30 min.* *Have children share their Shape Card posters (p. 9) *10-15*	**Whole Group Lessons** Investigation 1, Session 2 • Covering Pattern Blocks (p. 14-16), *30-40 min.* • Predict and Cover (p. 16-17) *20-30 min.*	**Whole Group Lessons** Investigation 1, Session 4 • Computer Activity: Introducing Solve Puzzles (p. 30-31) If possible, introduce this activity to your whole group and then do Choice Time. If not, introduce Solve Puzzles to small groups today and tomorrow while the rest do Choice Time.	**Whole Group Lessons** Investigation 1, Session 5 • Quick Images: Rectangular Arra (p. 203) Do 3-4 of these. *10 min* **Teacher checkpoint** • Predict & Cover (p. 33-35) Do this **after** Choice Time today. *20 - 25 mi*
Choice Time	**Choice Time** Have children who finish early play familiar Choice Time games from *Coins, Coupons, Combinations*: • Close to 20 • Collect 50¢ and /or From *Does It Walk, Crawl...* • Sorting Object Collections / Guess My Rule (p. 40)	**Choice Time**	**Choice Time** • Solve Puzzles (p. 32) • Predict & Cover (p. 18-19) • Build the Geoblock (p. 19	**Choice Time** • Predict & Cover (p. 18-19) • Build the Geoblock (p. 19) • Solve Puzzles (p. 32) *30 min.*
Homework • Family Letter (p. 169)	**Homework** • Shapes at Home - Student Sheet 2	**Homework**	**Homework** Shapes Within Shapes, Student Sheet 8	**Homework** • Composing New Shapes with 2 Triangles - Student Sheets 10 and 11
Teacher Support • Read "About the Mathematics" on p. I-18 prior to starting this unit. • *Quick Images* is an important classroom routine that will continue throughout the year. Be sure to read p.125-126 about this.	**Teacher Support**	**Teacher Support** Read the Teacher Note on p. 27-29 before doing "Predict and Cover"	**Teacher Support** Be sure to read the Teacher Notes on p. 36-37 concerning the Shapes Software and computers in this unit.	**Teacher Support**

Day 07	Day 08	Day 09	Day 10	Day 11
Every Day Counts Update All Discuss • Counting Tape (Refer to p. 34 for questions about Place Value and Number Sense) • Daily Depositor	**Every Day Counts** Update All Discuss • Clock • Coin Counter	**Every Day Counts** Update All Discuss • Measurement and Temperature Graph • Daily Depositor	**Every Day Counts** Update All Discuss • Daily Depositor • Calendar • Counting Tape / Today's Number	**Every Day Counts** Update All: Discuss: • Calendar • Coin Counter • Clock
Whole Group Lessons Investigation 1, Session 6 • The Last Block Game (p. 38-39) Demonstrate how to play this game. *10 min.* • Cube Buildings (p. 39-40, read p. 43 also) Have children make buildings as described on pgs 39-40; demonstrate the recording process on an overhead transparency of Student Sheet 12 rather than distributing copies to the students. *20 min.*	**Whole Group Lessons** Investigation 1, Session 7 Quick Images: Dot Patterns p. 38 (blackline on p. 201) If students need challenge beyond a single dot image, show two images together and ask for the total number of dots. *10-15 min.*	**Whole Group Lessons** Investigation 1, Session 8 • Class Discussion: Build a Building (p. 42) Do this **after** Choice Time today. *20 min.*	**Whole Group Lessons** Catch-Up Day Spend a few minutes today on a "measure hunt" with your students: have them look for objects 6-9 inches in length and then measure with a ruler.	**Whole Group Lessons** **Pocket Day** • Refer to notes on pages 119-122 for a description of the routine and its variations *30-40 min*
Choice Time • Build the Geoblock (p. 19) • Solve Puzzles (p. 32) • The Last Block Game (p. 38-39) • Build a Building (p. 41) *40 min.*	**Choice Time** • Build the Geoblock (p. 19) • Solve Puzzles (p. 32) • Last Block Game (p. 38-39) • Build a Building (p. 41) *45 min.*	**Choice Time** • Build the Geoblock (p. 19) • Solve Puzzles (p. 32) • Last Block Game (p. 38-39) • Build a Building (p. 41) *40 min.*	**Choice Time**	**Choice Time**
Homework	**Homework** Extend Your Thinking p. 124	**Homework**	**Homework**	**Homework**
Teacher Support ** Make inch chart for February Every Day Counts ahead of time using TR17 (in EDC book).*	**Teacher Support**	**Teacher Support**	**Teacher Support**	**Teacher Support**

Day 12	Day 13	Day 14	Day 15	Day 16
Every Day Counts Update All: Discuss: • Daily Depositor • Measurement	**Every Day Counts** Update All: Discuss: • Coin Collector - Shopping Problem • Measurement & Temperature Graph	**Every Day Counts** Update All Discuss • Calendar • Counting Tape	**Every Day Counts** Update All: Discuss: • Calendar • Counting Tape (Continue to refer to questions on p. 34).	**Every Day Counts** Update All Discuss • Daily Depositor • Measurement
Whole Group Lessons Investigation 2, Session 1 • Quick Images (p.46) *10 min.* • Guess My Shape Rule (p. 46-48) *25 min.* • Writing: What is a Rectangle? (p. 49; read p. 50-51)	**Whole Group Lessons** • Use or Look for a Pattern Problem 31 (PS p. T 61-62) *20 min.* Investigation 2, Session 2 •Ordering Rectangles (p. 52-53) *40 min.*	**Whole Group Lessons** • Use or Look for a Pattern Problem 32 (PS p. T 63-64) *20 min.* Investigation 2, Session 2, cont. • Covering Rectangles (p. 54) *40 min.*	**Whole Group Lessons** Investigation 2, Session 3 • Building Tile Rectangles (p. 55-57) *25-30 min.* • How Many Rectangles? (p. 57) *25-30 min.*	**Whole Group Lessons** Investigation 2, Session 4 • Quick Images: Rectangular Arra (p. 62-63) *10 min.* • Introduce Choice Time activities Describing Rectangles and How Many Rectangles (p. 58-59) *10 min.* • If possible, spend another 10 minutes introducing On Computer Activity (p. 63) not, work with small groups during Choic Time over the next few days to teach it.
Choice Time	**Choice Time**	**Choice Time**	**Choice Time**	**Choice Time** • The Last Block Game • Build a Building • Describing Rectangles (p. 58) • How Many rectangles? (p. 58) *40 min.*
Homework Composing New Shapes with 3 or 4 Triangles - Student Sheets 10 and 13	**Homework** Looking for Quadrilaterals, Student Sheet 14	**Homework** Practice Page A, Number Strings	**Homework** Only One Rectangle - Student Sheet 17	**Homework** Practice Page B, Number Strings
Teacher Support	**Teacher Support**	**Teacher Support**	**Teacher Support** Look for natural opportunities today, and in other lessons using tiles with rectangles, to introduce the concept of *area* to your students	**Teacher Support** Read the Dialogue Boxes on p. 60-61 prior to today's lesson.

Abbreviation KEY: **MP = Math Packet (**supplemental resource materials)
EDC=Every Day Counts, **DCRM**=Daily Cumulative Review Masters

Day 17	Day 18	Day 19	Day 20	Day 21
Every Day Counts Update All and Discuss • Daily Depositor • Coin Counter - generate combinations to show how many days you've been in school. • Calendar - have students share pattern observations for the month	**Every Day Counts** Update All Introduce • February Calendar (see p. 58) Discuss • Counting Tape - how many days until Day 100?	**Every Day Counts** Update All Introduce • Measurement for February * Discuss • Daily Depositor (you will need 450 straws or stirrers this month) • Coin Counter	**Every Day Counts** Introduce the 3-D shape graph (from March calendar - skip ahead and do this now to reinforce 3-D shapes) Update All and Discuss: • Measurement (Refer to p. 62 for "Discussion for the Sixth of the Month").	**Every Day Counts** Update all Discuss • Graph: Introduce and discuss a second of the 4 different 3-D shap • Daily Depositor • Calendar - predict the pattern
Whole Group Lessons Investigation 2, Session 5 Quick Images: Rectangular Arrays (p. 62-63) *10 min.* • Introduce Rectangle Riddles - a new Choice Time activity, p. 64 *10 min.*	**Whole Group Lessons** Investigation 2, Session 6 • Describing Rectangles (p. 66-67) *25-30 min.* • **Assessment** Picturing a Rectangle (p. 68-71) *25-30 min.*	**Whole Group Lessons** Investigation 3, Session 1 • Half & Half Rectangles (p. 74-76) *15 min.* • Introduce 2 new Choice Time activities: Half & Half Rectangles and Halves of Geoblocks (p. 76-77) *10 min.*	**Whole Group Lessons** **Pocket Day** • Refer to notes on pages 119-122 for description of the routine and its variations *30 min.* Investigation 3, Session 2 • Introduce another new Choice Time activity: Halves & Not Halves (p. 78) *10 min.*	**Whole Group Lessons** Catch-Up Day Spend 10-15 minutes today on another "measure hunt" with students looking for objects of a given length, locating them, and then measuring with a ruler.
Choice Time • Describing Rectangles (p. 58) • How Many Rectangles? (p. 58) • Rectangle Riddles (p. 64) • On Computer Activity: Growing Rectangles (p. 64) *50 min.*	**Choice Time**	**Choice Time** • Rectangle Riddles (p. 64) • Half & Half Rectangles (p. 77-78) • Halves of Geoblocks (p. 78) *35 min.*	**Choice Time** • Halves & Not Halves (p. 78) *20 min.*	**Choice Time**
Homework Extend Your Thinking, page 12	**Homework**	**Homework** • Half & Half Rectangles - Student Sheet 16 (p. 95, see p. 79 in the teachers guide for instructions.)	**Homework** • Things That Come in Halves - Student Sheet 22	**Homework**
Teacher Support	**Teacher Support**	**Teacher Support** Read the Teacher Note on p. 80 and the Dialogue Box on p. 81 prior to today's lesson.	**Teacher Support**	**Teacher Support**

Abbreviation KEY: **MP = Math Packet (**supplemental resource materials)
EDC=Every Day Counts, **DCRM**=Daily Cumulative Review Masters

Day 22	Day 23	Day 24	Day 25	Day 26
Every Day Counts Update All Discuss • Graph: Introduce and discuss the third of the 4 different 3-D shapes* • Daily Depositor • Measurement	**Every Day Counts** Update All Discuss • Graph: Introduce and discuss the last of the 4 different 3-D shapes • Daily Depositor • Coin Counter	**Every Day Counts** Update All: Discuss: • Daily Depositor • Measurement	**Every Day Counts** Update All and Discuss: • Calendar - symmetry of shapes • Shape Graph - have kids locate examples of each shape in the classroom and share their examples from home	**Every Day Counts** Update All Discuss • Daily Depositor • Counting Tape / Today's Number • Coin Counter
Whole Group Lessons Investigation 3, Session 3 • Introducing Shape Halves (p. 82-83) *25-30 min.*	**Whole Group Lessons** Investigation 3, Session 4 • Quick Images: Dots in Two 10-Frames (p. 126) *10-15 min.*	**Whole Group Lessons** Investigation 3, Session 5 • Class Discussion: Which Rectangles Make Halves? (p. 84-85) *20 min.* Do this **after** Choice Time today.	**Whole Group Lessons** Investigation 3, Session 6 • Fraction Flags (p. 86-88) *60 min.*	**Whole Group Lessons** Investigation 3, Session 7 Do some or all of Investigati 3, Sessions 7 & 8, Fourths and Thirds of Rectangles (p. 89-92) and/or Thirds and Fourths Flags (p. 93)
Choice Time • Rectangle Riddles (p. 64) **Teacher Checkpoint, p.78-79** • Half & Half Rectangles (p. 77-78) • Halves & Not Halves (p. 78) • Shape Halves (p. 84) *30-35 min.*	**Choice Time** • Half & Half Rectangles (p. 77-78) • Halves & Not Halves (p. 78) • Shape Halves (p. 84) • Halves of Geoblocks (p. 78) *45 min.*	**Choice Time** • Rectangle Riddles • Half & Half Rectangles • Halves & Not Halves • Shape Halves *40 min.*	**Choice Time**	**Choice Time**
Homework	**Homework** Designing Shapes That Can Be Cut in Half, Student Sheet 23	**Homework** Tile Fractions (MP16c)	**Homework** • Half & Half Flags - Student Sheets 24 and 16	**Homework** Extend Your Thinking, p. 12
Teacher Support * Every Day Counts 3-D Graph: Send home a letter asking families to collect and send in examples of the 4 different 3-D shapes so you can begin graphing next week.	**Teacher Support**	**Teacher Support**	**Teacher Support**	**Teacher Support**

Day 27	Day 28	Day 29	Day 30	Day 31
Every Day Counts Update All Discuss • Shape Graph - share any new examples from home • Measurement	**Every Day Counts** Update All Discuss: • Calendar (have students share pattern observations) • Counting Tape	**Every Day Counts** Update All: Discuss: • Daily Depositor • Counting Tape	**Every Day Counts** Update All: Discuss: • Counting Tape • Measurement	**Every Day Counts** Update All Discuss: • Calendar • Daily Depositor (See Helpful Hint about making new 100)
Whole Group Lessons Investigation 4, Session 1 • Symmetry in the World (p. 96-98) If you have a large-screen display, do this activity on the computer. If not, do the version of the lesson described on p. 98. *15-20 min.* • Introducing Geoblock Buildings (p. 98) *5-10 min.*	**Whole Group Lessons** Use or Look for a Pattern Problem 33 (Problem Solver, p. T 65-66) *20 min.* Investigation 4, Session 2 After Choice Time today, have students share some of their geoblock buildings. (p. 101) *10 min.*	**Whole Group Lessons** Investigation 4, Session 3 • Mirror Designs (p. 104-106) *20 min.* • Introducing Copy Tiles (p. 106) *10 min.*	**Whole Group Lessons** Investigation 4, Session 5 • Introducing Fold and Cut (p. 109-110) *10 min.*	**Whole Group Lessons** Investigation 4, Session 4 • Quick Images Using Two 10-Frames (see “Start Up” activities on p. 104) *10 min*
Choice Time • Mirrors Activity (p. 99) Introduce to small groups at the computer over the next few days if you don’t have large screen display. • Pattern Block Symmetry (p. 99) • Geoblock Buildings (p.99) *30 min.*	**Choice Time** • Shape Halves (p. 84) • Mirrors Activity (p. 99) • Pattern Block Symmetry (p. 99) • Geoblock Buildings (p.99) *30 min.*	**Choice Time** • Mirrors Activity • Pattern Block Symmetry • Geoblock Buildings • Mirror Designs (p. 107) • Copy Tiles (p. 107) *30 min.*	**Choice Time** • Mirrors Activity • Pattern Block Symmetry • Geoblock Buildings • Mirror Designs • Copy Tiles • Fold and Cut (p. 111) *50 min.*	**Choice Time** • Mirrors Activity • Pattern Block Symmetry • Geoblock Buildings • Mirror Designs • Copy Tiles *50 min*
Homework • Looking for Symmetry, Student Sheet 25	**Homework**	**Homework** • Home Connection 15 (MP16a & 16b), “Is It Symmetrical?”	**Homework** Fold and Cut, Student Sheet 27	**Homework** • Exploring Mirror Symmetr Student Sheet 26
Teacher Support Read Teacher Note on p. 102 and the Dialogue Box on p. 103 prior to today’s lesson.	**Teacher Support**	**Teacher Support**	**Teacher Support**	**Teacher Support**

Day 32	Day 33	Day 34	Day 35
Every Day Counts Update All Discuss: • Daily Depositor • 3-D Shape Graph	**Every Day Counts** Update All: Discuss: • Daily Depositor • Measurement	**Every Day Counts** Update All Discuss: • Daily Depositor • Calendar - see discussion for end of the month	**Every Day Counts**
Whole Group Lessons Investigation 4, Session 6 • Class Discussion: Is It Symmetrical? (p. 112) *20 min.* Do this **after** Choice Time today.	**Whole Group Lessons** Investigation 4, Session 7 • Quick Images: Dot Arrays (p. 126, 204) *10-15 min.* • **Assessment** Symmetrical Pictures (p. 113-114) *45 min.*	**Whole Group Lessons** Investigation 4, Session 7, cont'd. **Assessment:** Symmetrical Pictures (p. 113-114) Give children a chance to finish the artwork and writing they started yesterday. You might also take time to have them choose work from their folders to save (see p. 115).	**Whole Group Lessons** Catch-up Day
Choice Time	**Choice Time**	**Choice Time**	**Choice Time**
Homework	**Homework**	**Homework**	**Homework**
Teacher Support	**Teacher Support**	**Teacher Support**	**Teacher Support**

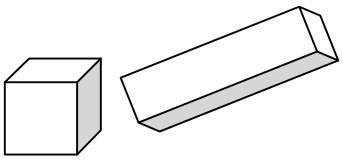
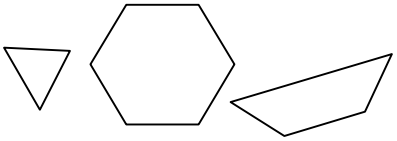
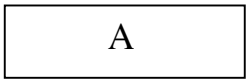
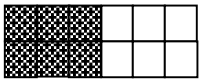
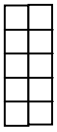
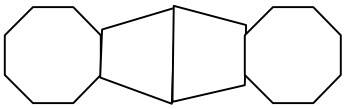
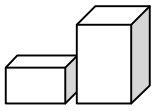
Investigations: Shapes, Halves, and Symmetry
Alignment to 2nd Grade Expectations

	Grade Level Expectation √ = Report Card Language	Activities that Address Expectations	Assessment Activity
NUMBER SENSE & NUMERATION	**Understands, models, reads, writes, orders and compares wholes, halves, and fourths**	Ordering Rectangles, p. 52 Half & Half Rectangles, p. 77 Halves of Geoblocks, p. 78 Halves & Not Halves, p. 78 Fraction Flags, p. 86 Fourths & Thirds of Rectangles, p. 89 Thirds & Fourths Flags, p. 93	"Which is Biggest?" papers **Teacher Checkpoint** Halves, p. 78-79 Student Sheets 16, 21, 23, 24 Tile Fractions, MP16c Student Sheet 16
	Can characterize a number as odd or even	Half & Half Rectangles, p. 77 Halves & Not Halves, p. 78	End of Unit Assessment
COMPUTATION	**Solves multiplication and division story problems with manipulatives, pictures, and/or numbers**	Build a Building, p. 41 Rectangle Riddles, p. 64	Student Sheet 12 Student Sheets 19-20
	Is fluent with addition and subtraction facts to 10. √ Fluent with addition and subtraction facts to 10.	Quick Images with 10 frames	Teacher observation and/or record of student work in math journal or on separate paper
	Knows and applies strategies to solve addition and subtraction facts to 18. √ Knows and applies strategies to solve addition and subtraction combinations to 18.	Quick Images with dots and 10 frames Today's Number How Many Pockets?	Record of student work in math journal or on separate paper (may be done occasionally as a checkpoint).
GEOMETRY	**Recognizes, describes, compares, classifies, and draws the following 2-dimensional shapes: square, triangle, rectangle, circle, trapezoid, hexagon, rhombus, and parallelogram** √ Recognizes, describes, compares, classifies and draws 2-dimensional shapes.	Sorting Shape Cards, p. 7 Guess My Shape Rule, p. 46	Shape Card Posters, p. 9 Writing, "What is a rectangle?" p. 49 Student Sheet 14

	Grade Level Expectation	Activities	Assessment
GEOMETRY	**Recognizes and describes the following 3-dimensional shapes: cube, sphere, rectangular prism, cylinder, and pyramid.** √ Recognizes and describes 3 - dimensional shapes.	Build the Geoblock, p. 19 3-D Shape Hunt, MP15	Teacher Observation – record on checklist (i.e. +, √, or –) on an ongoing basis
	Identifies and constructs simple designs that are symmetrical. √ Identifies and constructs designs that are symmetrical	Shape Halves, p. 84 Pattern Block Symmetry, p. 99 Geoblock Buildings, p. 99 Mirror Designs, p. 107 Copy Tiles, p. 107 Fold and Cut, p. 111	Student Sheets 25, 26, 27 **Assessment** Symmetrical Pictures, p. 113 End of Unit Assessment
	Combines known shapes to create shapes.	Covering Pattern Blocks, p. 14 Predict & Cover, p. 18 Build the Geoblock, p. 19	Student Sheet 8 **Teacher Checkpoint** Predict and Cover, p. 33-34 Student Sheets 11 and 13
MEASUREMENT	**Uses non-standard units (e.g. interlocking cubes, pennies, tiles, etc.) to develop concepts of volume, weights, <u>area</u>, and perimeter.**	Ordering Rectangles, p. 52	Teacher Observation

Choice Time

Name _____

My Choices	Date
Predict and Cover	
Build the Geoblock 	
Solve Puzzles	
The Last Block 	
Build a Building 	
Half-and-Half Rectangles 	
How Many Rectangles? 	
Pattern Block Symmetry 	
Geoblock Buildings 	

Teacher Directions

End of Unit Assessment
Grade 2

Shapes, Halves, and Symmetry

Teacher Notes:

1. *The focus is on naming the shapes and you do not want spelling to be an issue for students. If you have not been using a "math word wall" or a similar list of math vocabulary in your room, be sure that there is a list of geometry terms available to students as they work on the shape identification assessment.*
2. *For the half-and-half rectangle task, you might make available color tiles to students who may want to rebuild the rectangle. How do students determine if it is half-and-half? Do they count the shaded and white squares and compare the two numbers? Do they take 8 squares of one color and 7 of another and rebuild the rectangle with all of one color together in order to visualize one half?*
3. *Students have many opportunities in this unit to work with 2-dimensional pattern block shapes and the 3-dimensional geoblocks. As you observe them working, you might randomly ask them to name different shapes and note their responses on the shape checklist included in this notebook.*

Grade Level Expectations these assessments address:

- Recognizes, describes, compares, classifies, and draws the following 2-dimensional shapes: square, triangle, rectangle, circle, trapezoid, hexagon, rhombus, and parallelogram.
- Recognizes and describes the following 3-dimensional shapes: cube, sphere, rectangular prism, cylinder, and pyramid.
- Identifies and constructs simple designs that are symmetrical.
- Understands, models, reads, writes, orders, and compares wholes, halves, and fourths.
- Can characterize a number as odd or even.

Geometry: Recognizes, describes, compares, classifies, and draws the following 2-dimensional shapes:

Student	Square	Triangle	Rhombus	Trapezoid	Hexagon	Rectangle	Circle

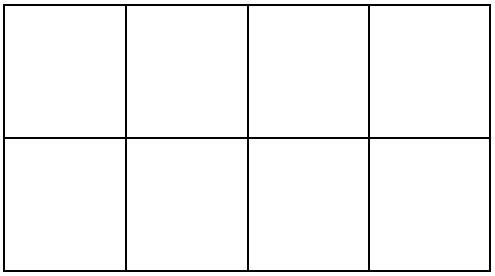
Geometry: Recognizes and describes the following 3-dimensional shapes:

Student	Cube	Cylinder	Pyramid	Sphere	Rectangular prism

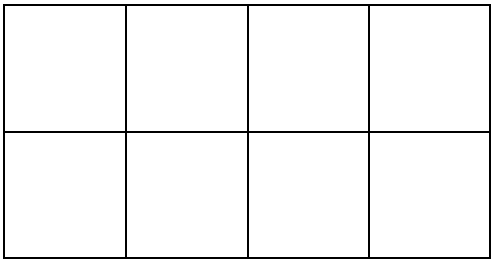
Name _____ Date _____

You need a red, blue, and yellow crayon to color in the fractions shown below.

Color the tiles so that this rectangle is 1/2 red and 1/2 blue.

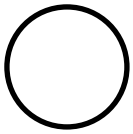
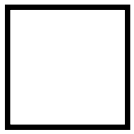


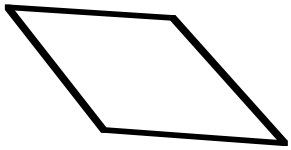
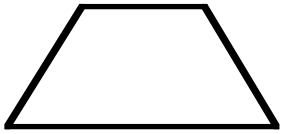
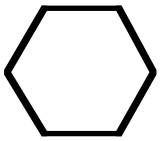
Color the tiles in this rectangle 1/4 red, 1/4 blue, 1/4 white, and 1/4 yellow.



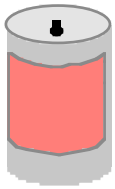
Name Date

Name each of the 6 shapes shown below.

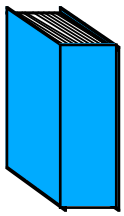




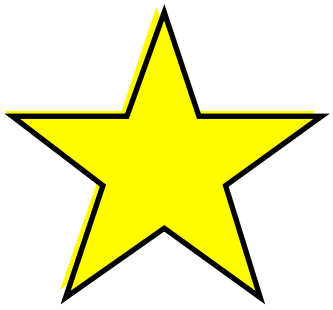
Draw a line from each shape to its name.



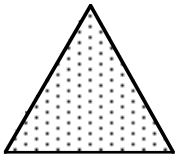
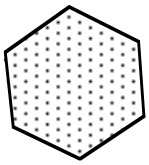
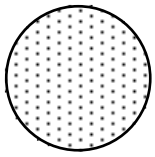
Picture of metronome goes here



pyramid **cylinder** **cube** **rectangular prism** **sphere**



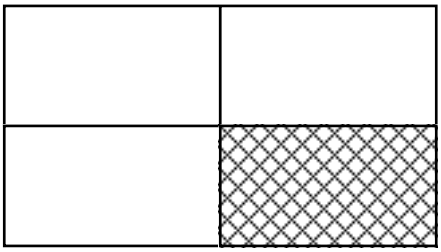
Draw a line of symmetry on the star.

Solve the riddle. Cross out the pictures that do not match the clues. Write the name of the shape on the line.

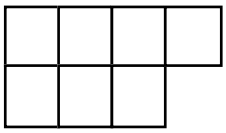
I have less than 4 corners.
I have straight sides.

Name Date



What fraction of this "Fraction Flag" is shaded with  ?

_____



Is 7 an even or odd number? _____

How do you know? _____

_____

_____

Student	Understands...and compares wholes, halves, & fourths	Can characterize a number as odd or even	Identifies and constructs simple designs that are symmetrical	Combines known shapes to create shapes	Recognizes 2-D shapes (see checklist)	Recognizes 3-D shapes (see checklist)	Solves x and ÷ story problems with manipulatives	Knows & applies strategies to solve +/- facts to 18	Teacher Notes