

Materials List

What You'll Need in Your Math Kit

You'll use the following materials regularly in *Third Grade Math with Confidence*. Stash them in a box or basket and always keep them ready for your next lesson. (See page 9 in the Introduction for more detailed descriptions of each item.)

- Base-ten blocks (at least 50 units, 20 rods, 10 flats, and 1 large cube)
- 50 small counters
- Coins (20 pennies, 20 nickels, 20 dimes, 10 quarters)
- Play money (20 each of one-dollar bills, ten-dollar bills, and hundred-dollar bills; 10 each of five-dollar bills, twenty-dollar bills, and thousand-dollar bills)
- Clock with hands
- Fraction circles
- 1-foot (or 30-centimeter) ruler, labeled with both inches and centimeters
- 2 packs of playing cards and 2 regular, six-sided dice
- Blank paper
- Pencils
- 1 page protector and 1 dry-erase marker
- Binder with about 10 page protectors, optional

Other Supplies

Besides your Math Kit, you'll also need the following household items. You'll only need most of them once or twice, so you don't need to gather them ahead of time or store them separately. Check the unit overviews for the specific household items you'll need for each unit.

Items marked with an asterisk are needed for the optional enrichment lessons at the end of each unit.

- 6 toothpicks
- White crayon
- Marker or highlighter
- Markers, crayons, or colored pencils
- Small slips of paper
- 5-6 small boxes or bowls
- *24 small snack items, such as raisins, pieces of cereal, or small candies
- Paper clip
- *3 clear jars or bowls
- *3 sets of small objects (such as crackers, blocks, or cotton balls) with 50-150 objects in each set
- Measuring cups (1/4-cup, 1/3-cup, 1/2-cup, and 1-cup)
- Water
- *Ingredients for pumpkin bread or another recipe. See the recipe in Lesson 6.11 (page 204) for suggested ingredients.
- 3 small office items (such as a pencil, eraser, and ruler)
- *Toy catalog or access to a website with items your child would like to buy
- Calendar, optional
- *Varies, depending on which activity you choose. See Lesson 8.9 (page 266) for options.
- Scissors
- Tape
- 3 books of varying sizes
- Masking tape or yarn

- Yardstick and meterstick, optional
- Map of your town (either paper or on a map app), optional
- *Tape measure
- *20-25 small snacks, such as blueberries, chocolate chips, or pieces of cereal (optional)
- 6 dice
- *Map app
- *Contact paper (self-adhesive, clear vinyl)
- *Black construction paper
- *Tissue paper in assorted colors
- *Paper plate
- *Pencil
- *Tape, optional
- Yarn
- Object that weighs about 1 ounce, such as a slice of bread, AA battery, or a stack of 5 quarters
- Object that weighs about 1 pound, such as a loaf of bread, can of vegetables, or box of pasta
- 5 pantry items of varying weights, with tape or a sticky note covering the items' labeled weights
- Kitchen scale or postal scale that measures in pounds and ounces, optional
- 5 small household objects, optional
- Object that weighs about 1 gram, such as a paper clip, 1-dollar bill, or thumbtack
- Object that weighs about 1 kilogram, such as a pair of adult shoes, a pineapple, or your child's student workbook
- Kitchen scale or postal scale that measures in kilograms and grams, optional
- 1-pint and 1-quart measuring cups, optional
- 5 containers of varying capacities
- Eyedropper, optional
- 1-liter container (such as a large water bottle or measuring cup), optional
- Variety of food and personal care items, with capacity labeled in milliliters
- *Honey
- *Blue dishwashing soap
- *Vegetable oil
- *Rubbing alcohol (surgical spirit)
- *Food coloring
- *Tall, clear glass or glass jar
- *Measuring cup that measures in milliliters
- *Small bowls and spoons for mixing

Guide to the Blackline Masters

Digital Copies of Blackline Masters

Prefer to print the Blackline Masters rather than copy them from the book? **Download digital copies of all Math with Confidence Blackline Masters at welltrainedmind.com/mwc.**



Frequently-Used Blackline Masters

You'll use these pages often throughout the book. Some are for modeling important concepts, while others provide helpful reference information. Place these pages in page protectors in a binder so they're always available. Encourage your child to refer to them as needed as he completes the Practice and Review pages.

- Memory Work (Blackline Master 1)
- How to Read Word Problems (Blackline Master 2)
- Place-Value Chart (Blackline Master 3)
- Addition and Subtraction Algorithms (Blackline Master 4)
- Dot Array and L-cover (Blackline Master 5)
- Multiplication Strategies (Blackline Master 6)

Short-Term-Use Blackline Masters

These pages give your child hands-on practice with measurement and geometry concepts. You will use them for only a few lessons, and you do not need to save these Blackline Masters after you finish the corresponding unit.

- Paper Ruler (Blackline Master 8), used in Unit 9 only
- Quadrilateral Cards (Blackline Master 9), used in Unit 13 only
- Pentominoes (Blackline Master 10) used in Unit 13 only
- Nets (Blackline Master 11), used in Unit 13 only

Optional Blackline Masters

These blackline masters are optional. If you have real fraction circles, base-ten blocks, and play money, you do not need Blackline Masters 7, 12, and 13. The Subtraction Climb and Slide page is an optional game for practicing the subtraction facts. See the Unit 2 Checkpoint (page 79) for details on whether or not you need it.

- *Fraction Circles (Blackline Master 7)
- *Base-Ten Blocks (Blackline Master 12)
- *Play Money (Blackline Master 13)
- *Subtraction Climb and Slide (Blackline Master 14)

Memory Work (Blackline Master 1)

$$3 + 4 = 7$$

↑ ↑ ↑
addends sum

$$7 - 4 = 3$$

↑
difference

$$5 < 6$$

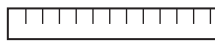
↑
less-than sign

$$6 > 5$$

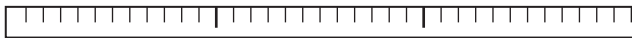
↑
greater-than sign

Odd numbers have
1, 3, 5, 7, or 9
in the ones-place.

Even numbers have
0, 2, 4, 6, or 8
in the ones-place.



1 foot = 12 inches



1 yard = 3 feet

1 yard = 36 inches



1 meter = 100 centimeters

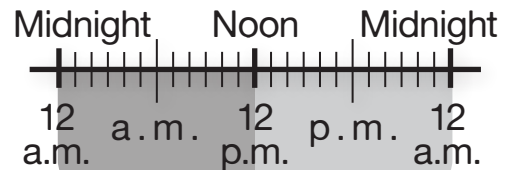
1 year = 12 months

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

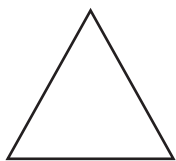
1 minute = 60 seconds



Half-hour
30 minutes



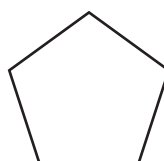
Quarter-hour
15 minutes



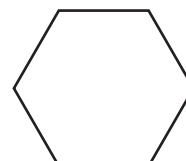
Triangle
3 sides



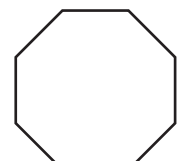
Quadrilateral
4 sides



Pentagon
5 sides



Hexagon
6 sides



Octagon
8 sides

$$3 \times 4 = 12$$

↑ ↑ ↑
 factors product

$$9 \div 4 = 2 \text{ R } 1$$

↑ ↑ ↑ ↑
 dividend divisor quotient remainder

1 kilometer = 1,000 meters

1 kilogram = 1,000 grams

1 liter = 1,000 milliliters

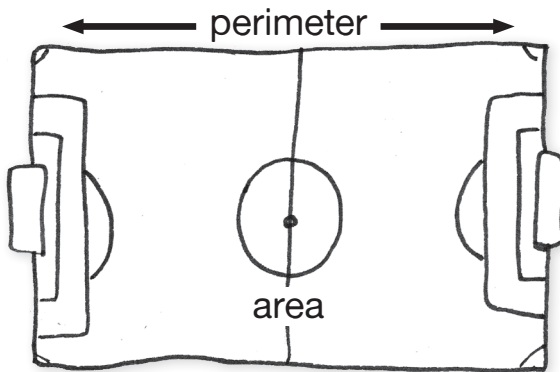
1 pound = 16 ounces

1 pint = 2 cups

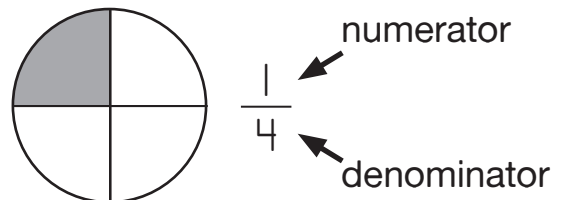
1 quart = 2 pints

1 gallon = 4 quarts

Perimeter measures the distance around the outside edge of a shape.



Area measures the amount of space that a shape covers.



$$\frac{1}{2} = \frac{2}{4}$$

equivalent fractions

$$2 \frac{1}{3}$$

mixed number



Rectangle
4 right angles



Square
4 right angles
4 equal sides



Rhombus
4 equal sides
2 pairs of parallel sides

How to Read Word Problems (Blackline Master 2)

1. Read the problem.
2. Identify the goal.
3. Read the problem again.
 - Read slowly and carefully.
 - Imagine what's happening.
 - Stop after each sentence to make sure you understand it.
4. Solve.

Place-Value Chart (Blackline Master 3)

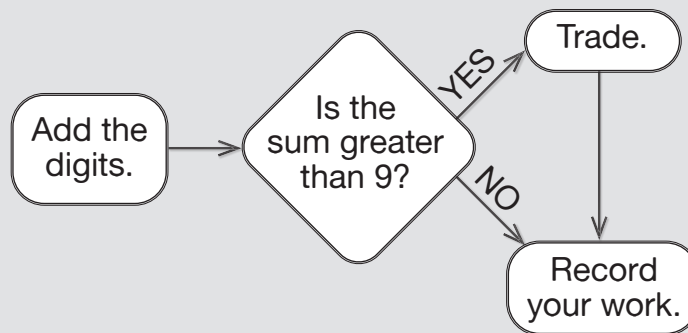
tens	ones

	thousands
	hundreds

Addition and Subtraction Algorithms (Blackline Master 4)

The Addition Algorithm

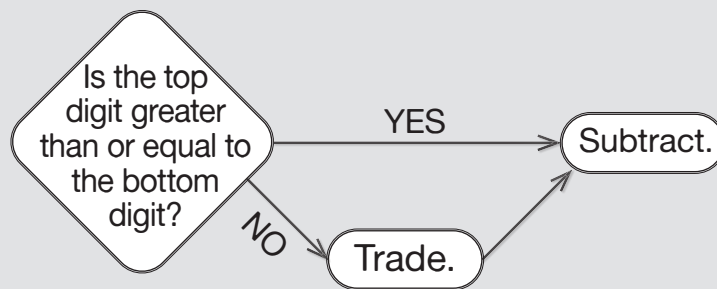
*** Start with the ones-place.



*** Follow the steps for all the places.

The Subtraction Algorithm

*** Start with the ones-place.



*** Follow the steps for all the places.

Directions: Cut on the dotted line. You will be left with a gray L.

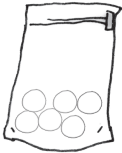

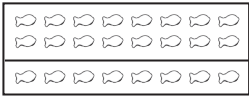
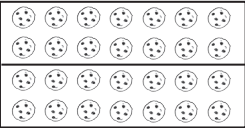
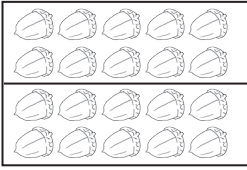
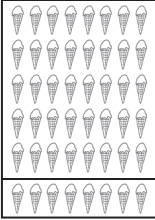
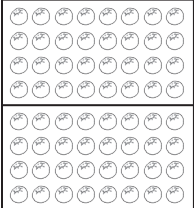
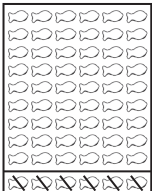
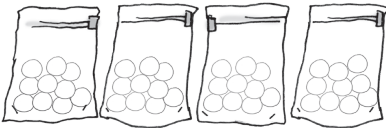


Multiplication Strategies (Blackline Master 6)

All facts Use the facts within the same table as stepping stones.

$5 \times 7 = 35$ $6 \times 7 = 42$ $7 \times 7 = 49$

$5 \times 7 = 35$
 $35 + 7 + 7 = 49$
 $7 \times 7 = 49$

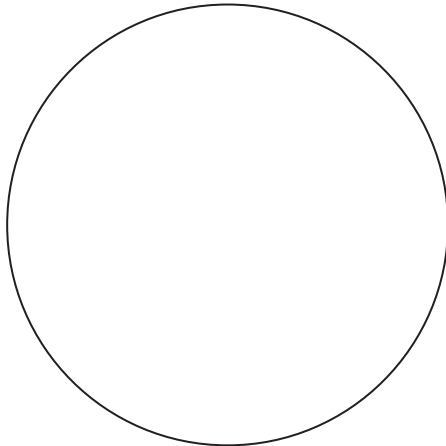
<p>1 Any number times 1 equals the number.</p>  <p>$1 \times 6 = 6$</p>	<p>2 Double the number.</p>  <p>Double 5 is 10. $2 \times 5 = 10$</p>	<p>3 Use the related $\times 2$ fact.</p>  <p>$2 \times 8 = 16$ $16 + 8 = 24$ $3 \times 8 = 24$</p>
<p>4 Double the related $\times 2$ fact.</p>  <p>$2 \times 7 = 14$ Double 14 is 28. $4 \times 7 = 28$</p>	<p>5 Make groups of 10.</p>  <p>4 groups of 5 equal 2 tens. $4 \times 5 = 20$</p>	<p>6 Use the related $\times 5$ fact.</p>  <p>$5 \times 8 = 40$ $40 + 8 = 48$ $6 \times 8 = 48$</p>
<p>8 Double the related $\times 4$ fact.</p>  <p>$4 \times 8 = 32$ Double 32 is 64. $8 \times 8 = 64$</p>	<p>9 Use the related $\times 10$ fact.</p>  <p>$10 \times 6 = 60$ $60 - 6 = 54$ $9 \times 6 = 54$</p>	<p>10 Use place-value thinking.</p>  <p>4 tens = 40 $4 \times 10 = 40$</p>

Fraction Circles (Blackline Master 7)

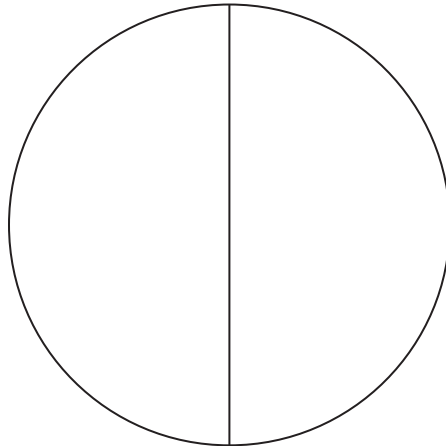
You do not need these if you have plastic or wooden fraction circles.

Directions: Copy this page onto sturdy paper. Color each circle the color listed next to it. Then, cut along the lines.

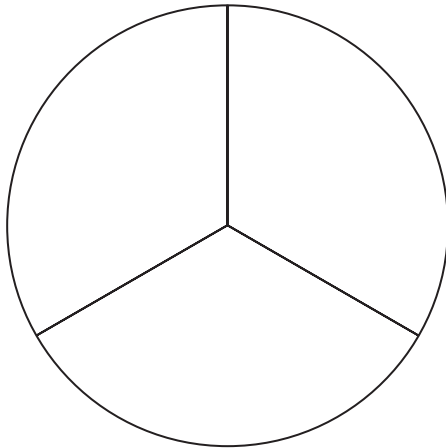
red



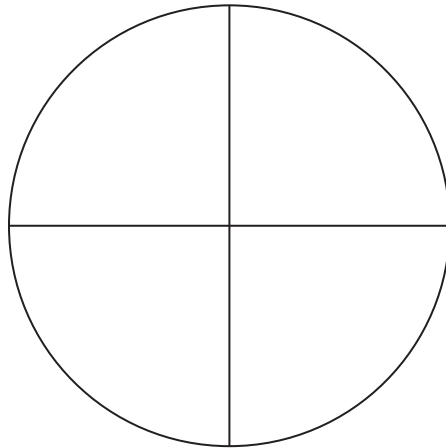
orange



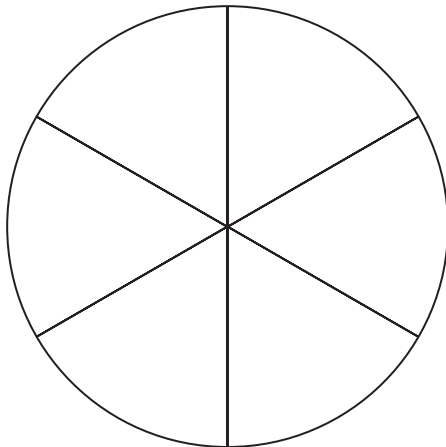
yellow



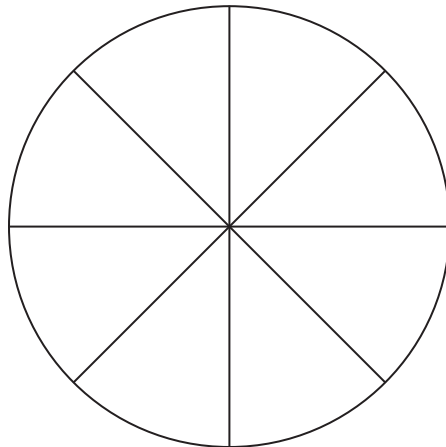
green



blue



purple

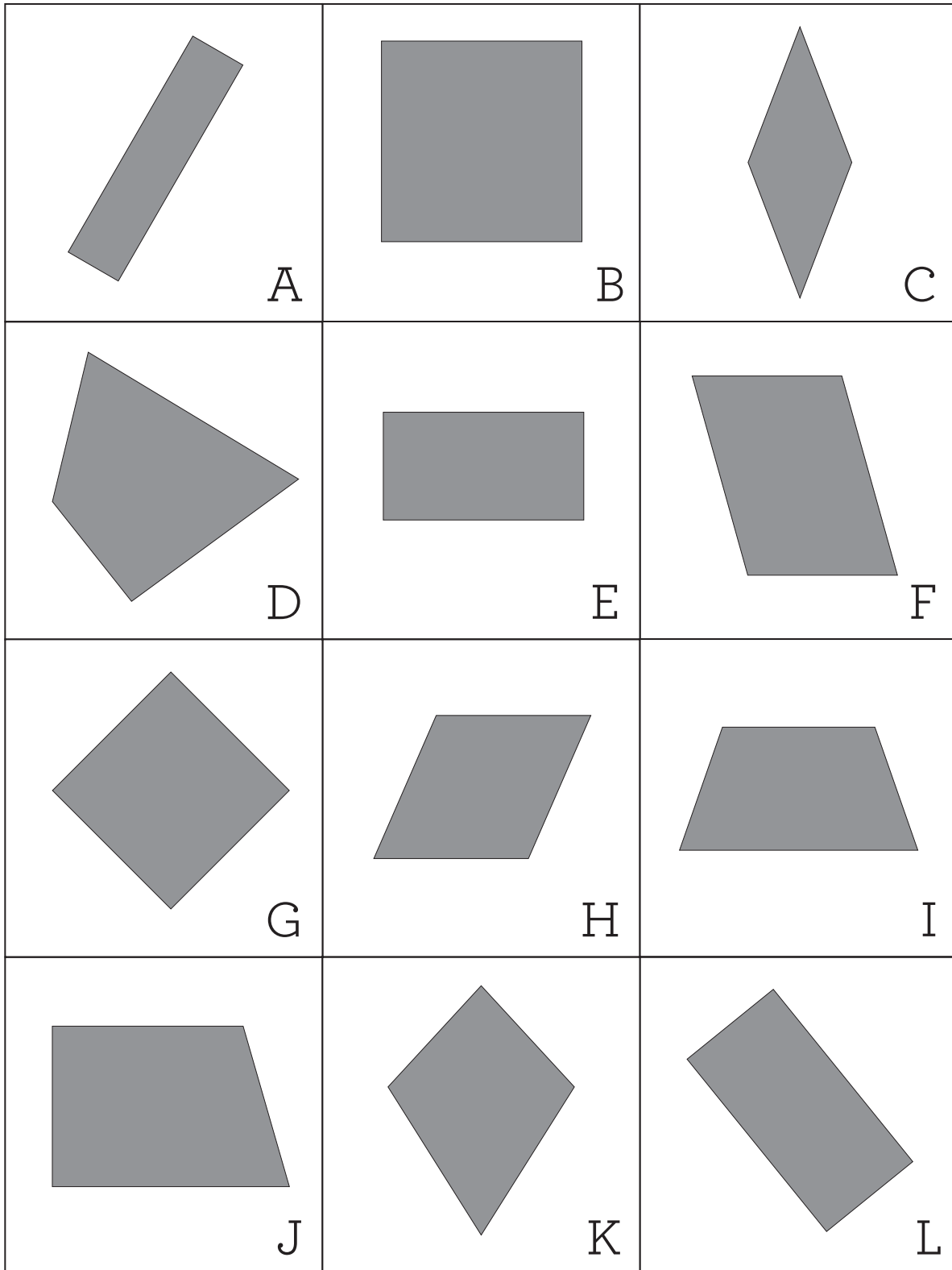


Paper Ruler (Blackline Master 8)

Directions: Cut out the paper ruler on the solid line.

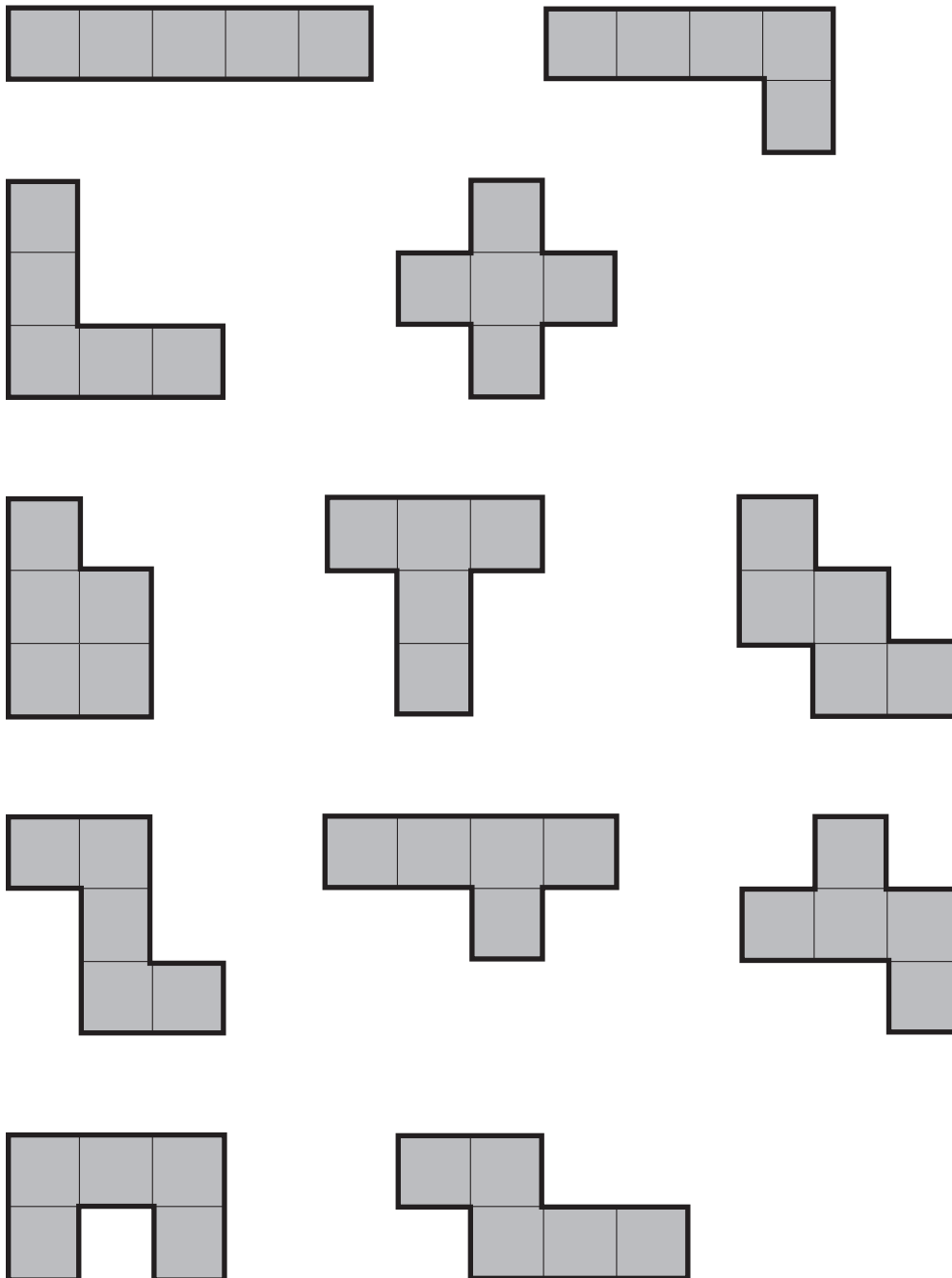


Quadrilateral Cards (Blackline Master 9)



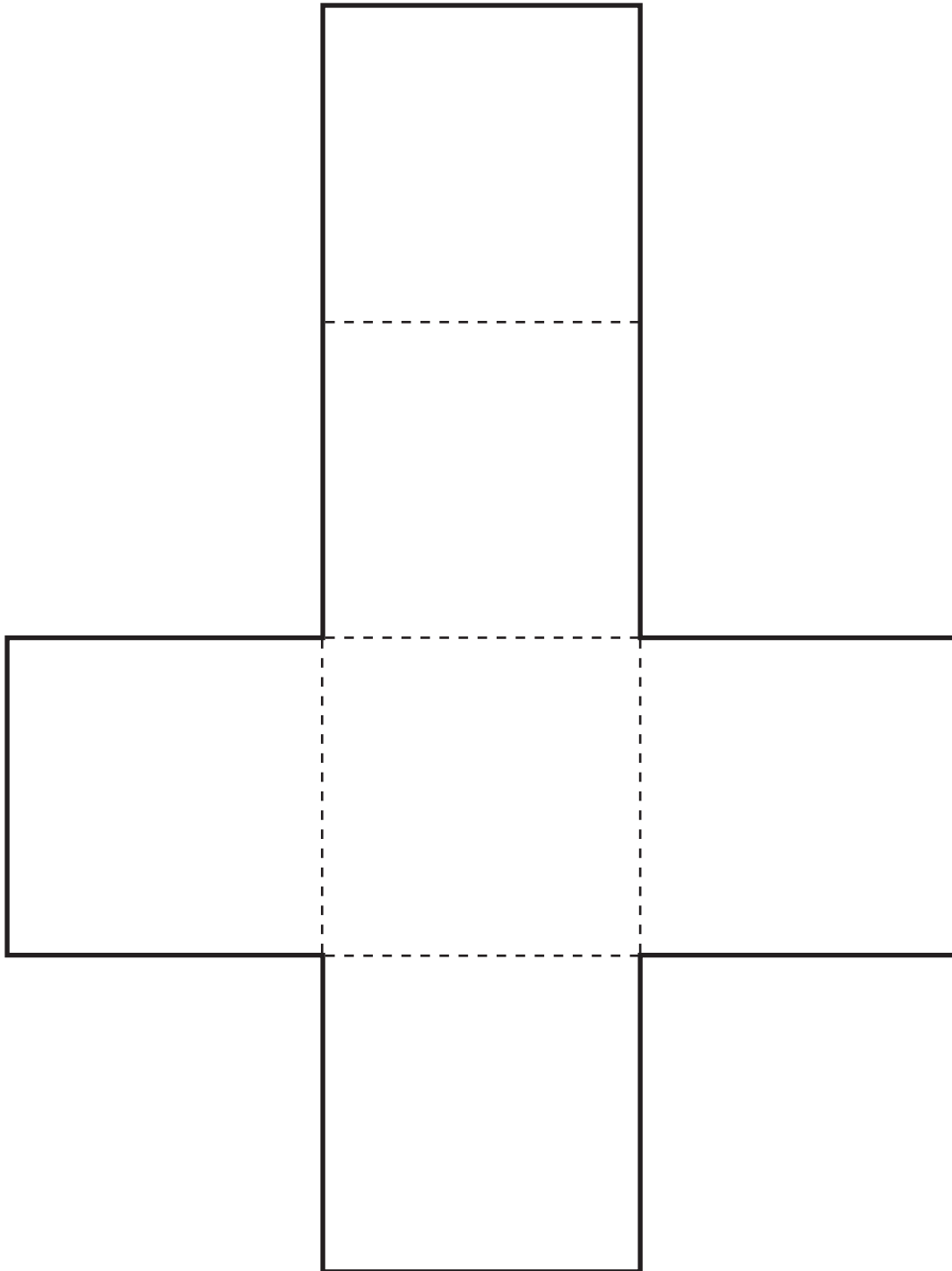
Pentominoes (Blackline Master 10)

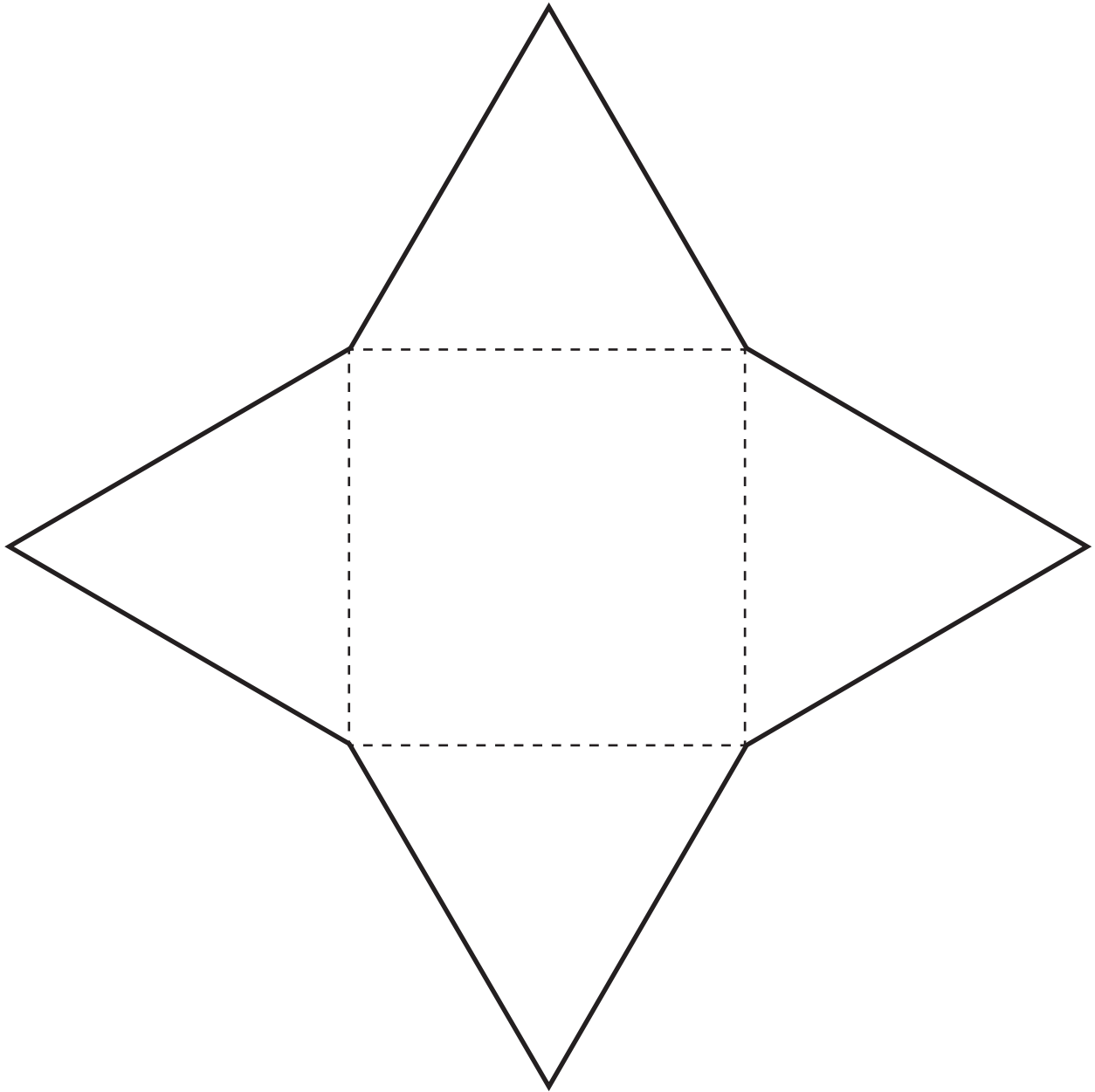
Directions: Copy this page onto sturdy paper. Cut out the pentominoes on the heavy lines.

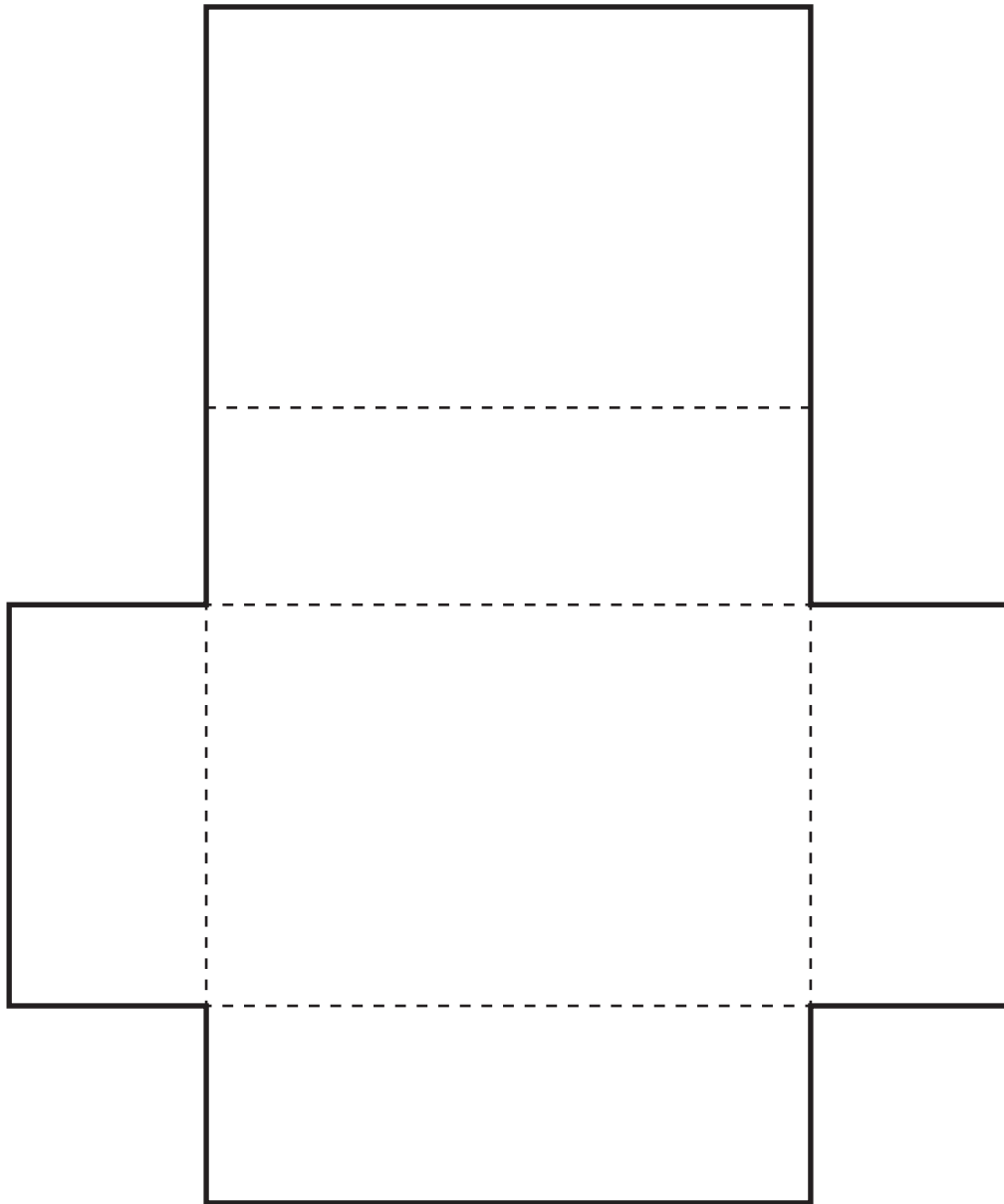


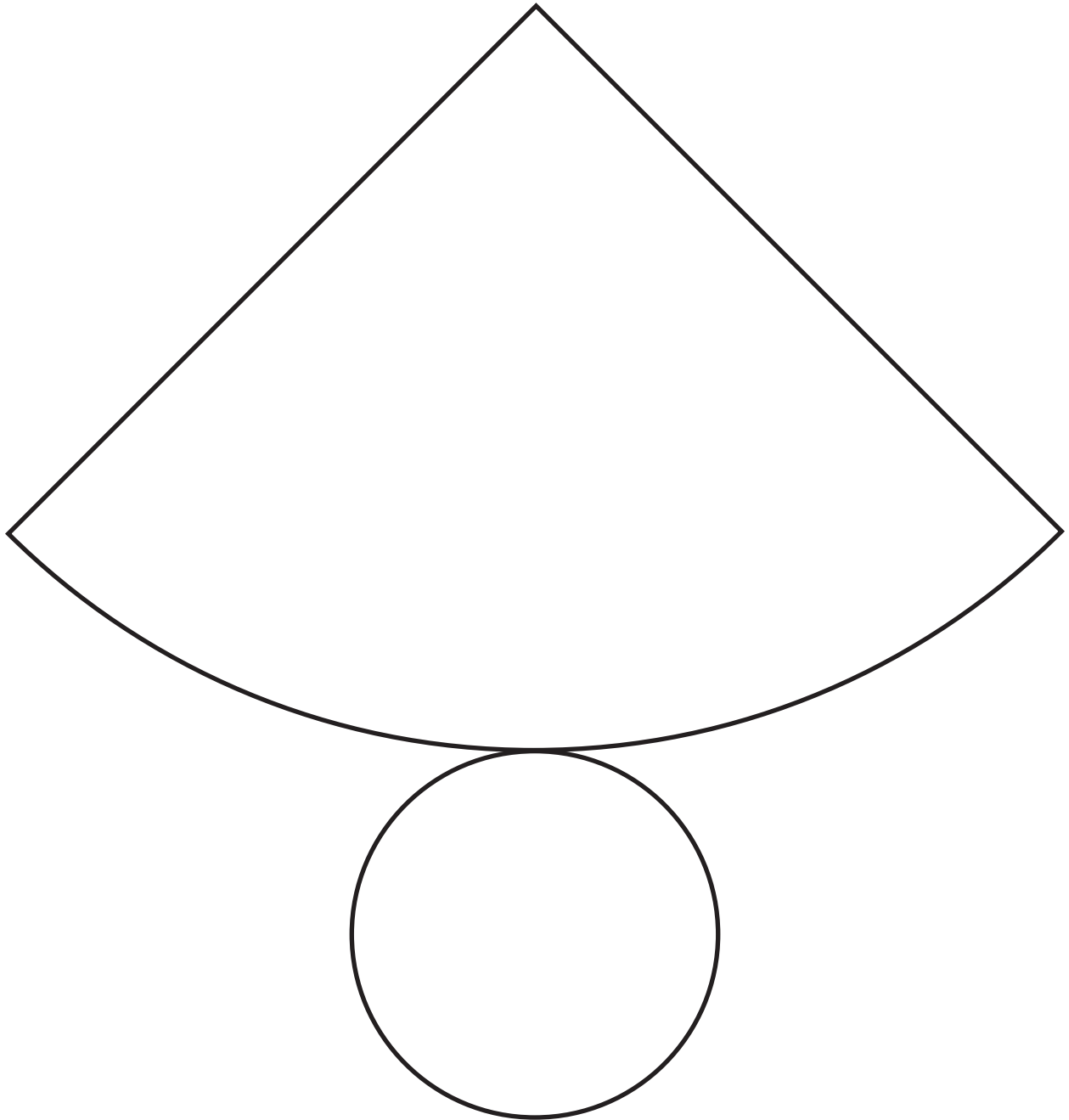
Nets (Blackline Master 11)

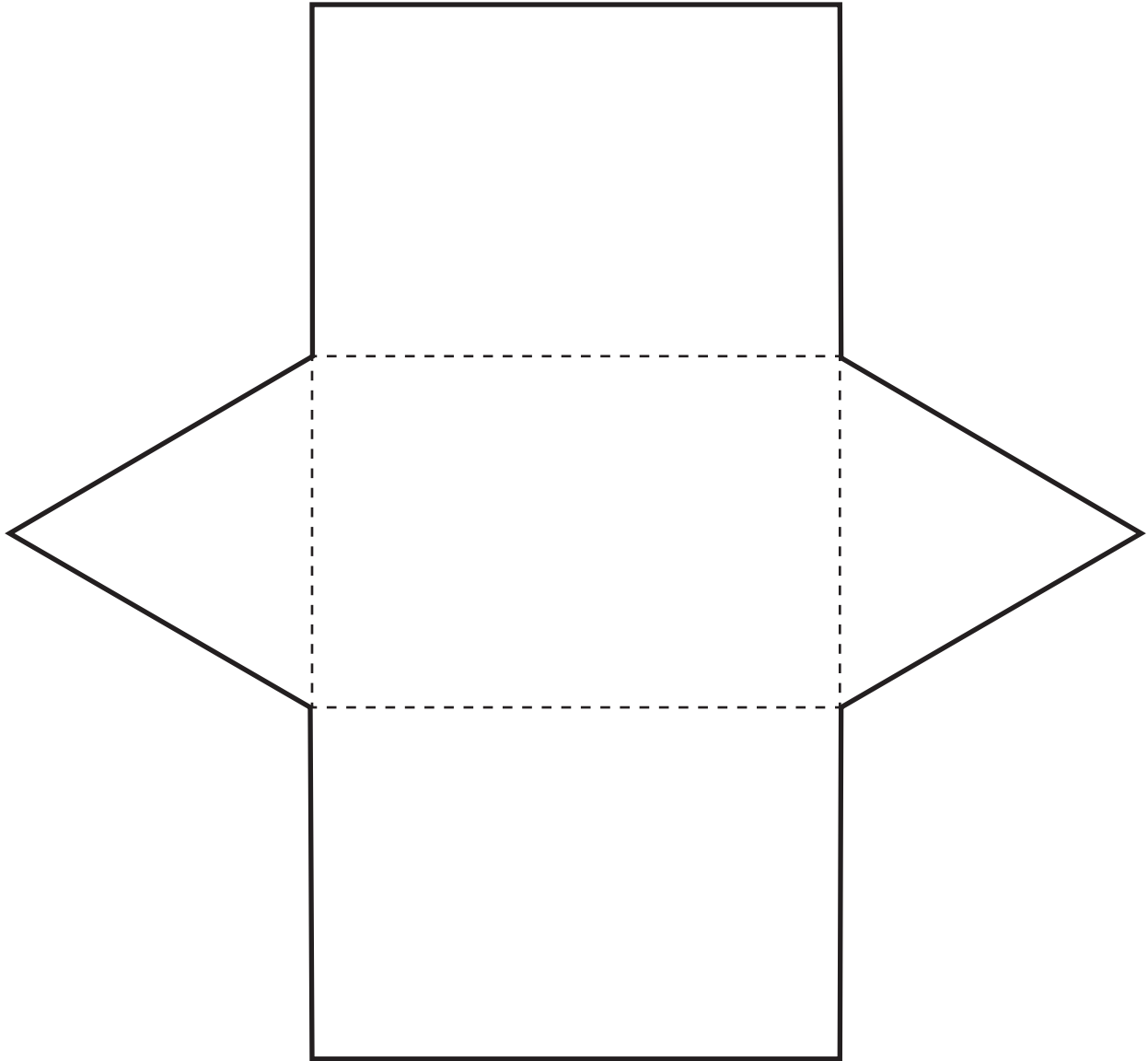
Directions: Copy these pages onto sturdy paper. Cut out along the solid lines.

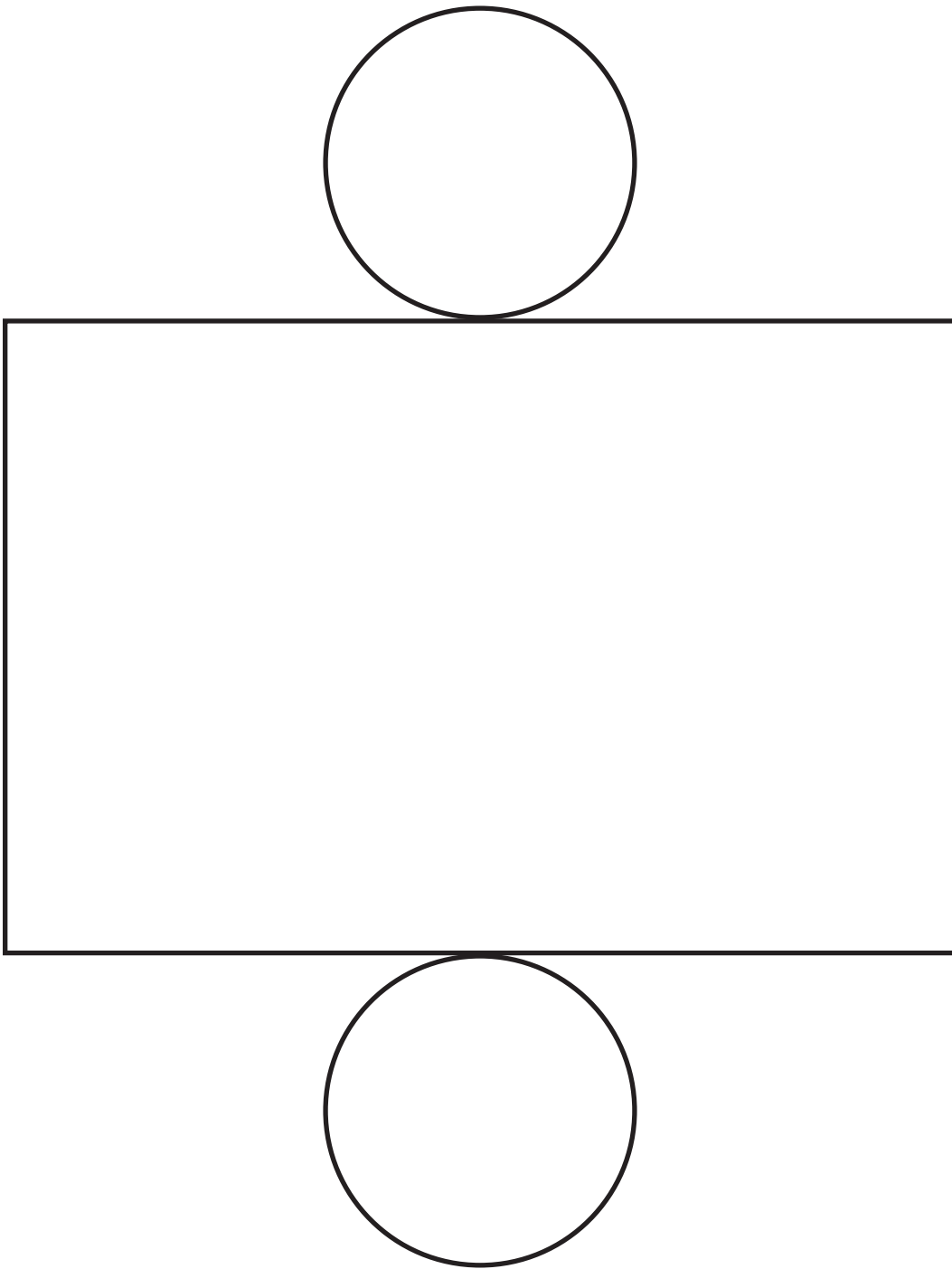








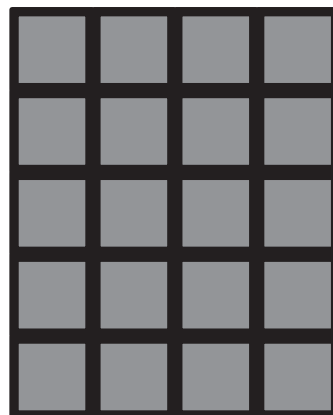
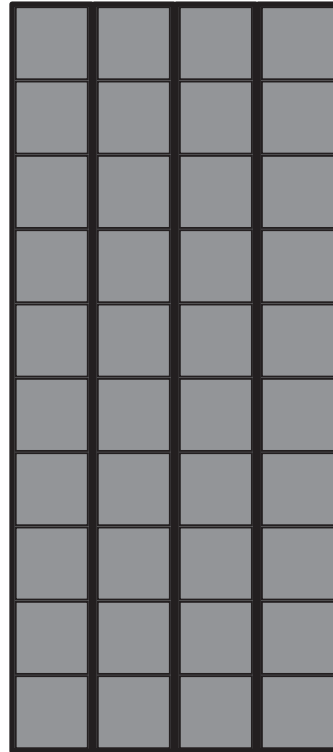
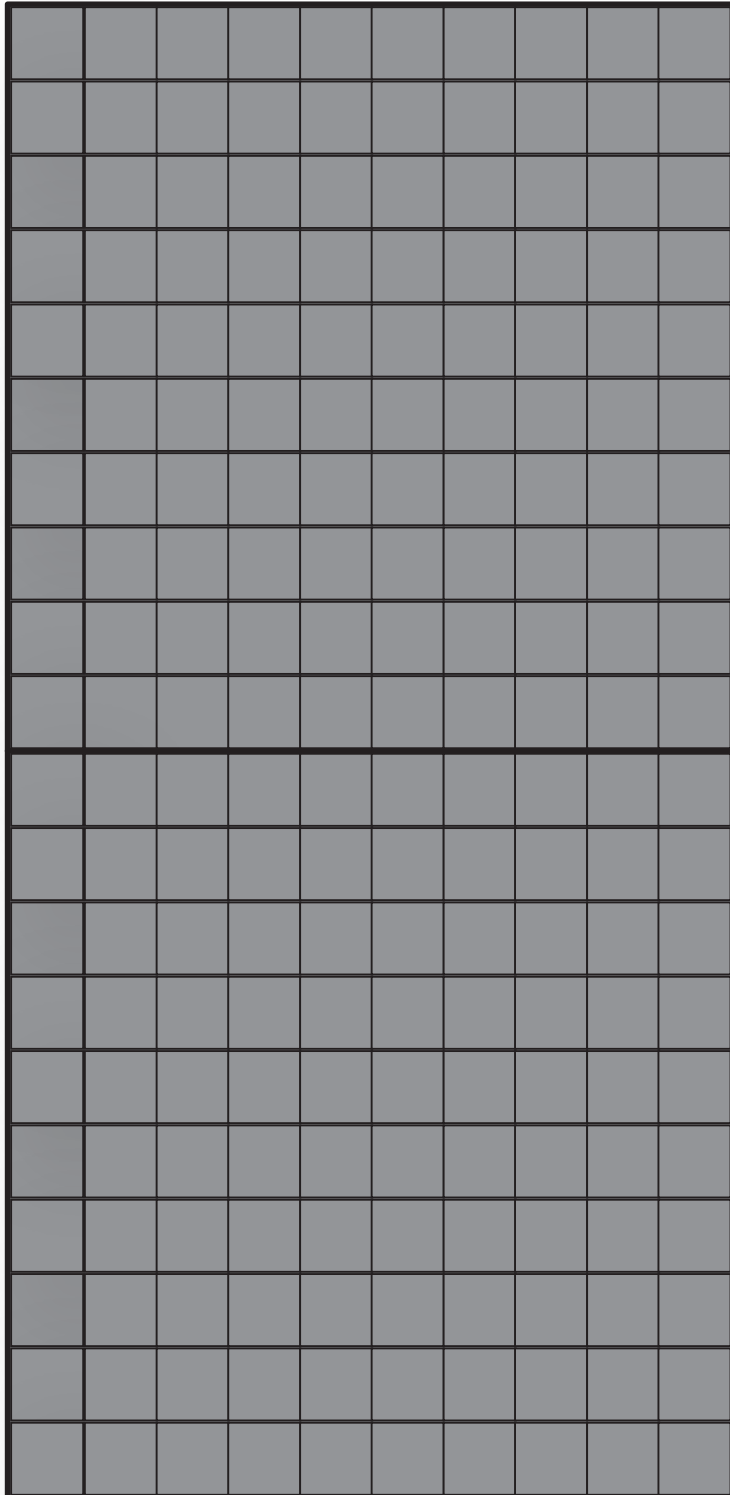




Base-Ten Blocks (Blackline Master 12)

You do not need these if you have real base-ten blocks.

Directions: Make 5 copies of this page on sturdy paper. Cut out the blocks on the dark lines.



Play Paper Bills for Families Outside the US (Blackline Master 13)

You do not need these if you have other play money, either from a toy cash register or board game.

Directions: Make 2 copies of this page on sturdy paper and cut out the paper bills.

<input type="radio"/> \$1 <input type="radio"/>	<input type="radio"/> \$1 <input type="radio"/>	<input type="radio"/> \$1 <input type="radio"/>	<input type="radio"/> \$1 <input type="radio"/>	<input type="radio"/> \$1 <input type="radio"/>
<input type="radio"/> \$5 <input type="radio"/>	<input type="radio"/> \$5 <input type="radio"/>	<input type="radio"/> \$5 <input type="radio"/>	<input type="radio"/> \$5 <input type="radio"/>	<input type="radio"/> \$5 <input type="radio"/>
<input type="radio"/> \$10 <input type="radio"/>	<input type="radio"/> \$10 <input type="radio"/>	<input type="radio"/> \$10 <input type="radio"/>	<input type="radio"/> \$10 <input type="radio"/>	<input type="radio"/> \$10 <input type="radio"/>
<input type="radio"/> \$20 <input type="radio"/>	<input type="radio"/> \$20 <input type="radio"/>	<input type="radio"/> \$20 <input type="radio"/>	<input type="radio"/> \$20 <input type="radio"/>	<input type="radio"/> \$20 <input type="radio"/>
<input type="radio"/> \$100 <input type="radio"/>	<input type="radio"/> \$100 <input type="radio"/>	<input type="radio"/> \$100 <input type="radio"/>	<input type="radio"/> \$100 <input type="radio"/>	<input type="radio"/> \$100 <input type="radio"/>
<input type="radio"/> \$1,000 <input type="radio"/>	<input type="radio"/> \$1,000 <input type="radio"/>	<input type="radio"/> \$1,000 <input type="radio"/>	<input type="radio"/> \$1,000 <input type="radio"/>	<input type="radio"/> \$1,000 <input type="radio"/>

Subtraction Climb and Slide (Blackline Master 14)

Use this game as needed to review subtraction facts.

Materials: 2 different-colored counters to use as game tokens; die

Object of the Game: Be the first player to reach the Finish square.

Each player chooses a counter to use as a game token and places it on the Start square.

On your turn, roll the die and advance your token the corresponding number of squares. Say the answer to the problem on your landing square.

If you land on a square at the bottom of a ladder, “climb” the ladder and place your game token on the square at the top of the ladder. If you land on a square at the top of a slide, slide down the slide and place your game token on the square at the bottom of the slide.

The first player to reach Finish wins the game.

