

Games to Play with Dice

Make 10

Players: 2

Materials: 1 or 2 dice, scratch paper (for keeping score)

Object: Make a 10 from the number rolled

One die version: One die is rolled. Players try to be the first player to shout what number needs to be added to the number on the die to make a ten. The number needed to make ten becomes the player's score for that round. For example, if a 3 is rolled, players would shout 7, because 3 and 7 make 10. The first player to answer correctly earns 7 points.

Two die version: Two dice are rolled. Players must now add or subtract to make 10. For example, if two 6s are rolled, players would shout 2 because $6+6=12$ and $12-2=10$. The first player to answer correctly earns 2 points.

*Challenge- Add to 20 instead of 10.

Pig

Players: 2

Materials: 1 or 2 dice

Object: Be the first player to reach 100

One die game: On a turn, a player can roll repeatedly until (1) the player rolls a 1 OR (2) the player chooses to hold (stop rolling). Each number rolled is added to the player's total. If a 1 is rolled, all points for that turn are lost.

Scoring examples:

1. Suzy rolls a 4 and decides to continue. She then rolls 5 more times (3, 4, 2, 6, 1). Because she rolled a 1, her turn ends and she receives no points for the numbers rolled.
2. Marcus rolls a 6 and decides to continue. He rolls 3 more times (4, 3, 5) and decides to hold. His score for the round is 18 ($6+4+3+5+18$)

Two die game: Two dice are rolled. If a single 1 is rolled on either dice, the turn ends and all points are lost. If two 1s are rolled on a single turn, the player scores 25 points. Doubles, for example, a 2 and a 2, are worth double points ($4 \times 2 = 8$).

Closest to 100

Players: 2

Materials: 2 dice, 120 chart (optional), scratch paper (for keeping score)

Object: Score as close to 100 as possible after 5 rounds

How to play: Roll 2 dice and create a 2-digit number. For example, if a 3 and 5 are rolled, you can make 35 or 53. Think about how far away the 2-digit number is from 100.

One way to find the difference is to count up. For example, if the number rolled is 53, count up by 10s and then add the 1's needed to get to 100. So, in the example below, the difference is 47.

$$\begin{array}{r} +10 +10 +10 +10 +7 \\ 53, 63, 73, 83, 93, 100 \end{array}$$

Scoring: Play 5 rounds. For each round, players calculate their score as the differences from 100. The player with a score closest to 100 after 5 rounds wins. This introduces the element of strategy as players decide how to combine their numbers rolled to create a difference that gets their total score as close to 100 as possible.

Cross Out

Players:2

Materials: 2 dice, scratch paper

Object: Have the smallest score

How to play; Players write the digits 1 to 9 on a piece of paper. Alternate turns. On a turn, a player rolls 2 dice, adds the numbers together, and crosses off one number or a combination of numbers to equal the sum of the numbers rolled.

Example: A player rolls a 4 and a 5, for a sum of 9. On their board, they can cross out any combination of numbers that equal 9, such as 3+6, 1+2+6, 4+5, 9, 4+3+2, etc. Play continues. When a player rolls a sum that can't be crossed out, they are done rolling for the round. The other player continues to roll and cross out until they can no longer cross out a sum. When both players have reached the point they can no longer cross out a sum, each player adds the uncovered digits on their boards and the smallest sum wins.

Games to Play with Dominoes

Domino Keepers Addition

A game for 2 players (or two teams)

All of the dominoes are placed in the center face down. Both players pick up a domino at the same time. Each player tells the sum of the dots on their domino, e.g. $2+4=6$, $5+3=8$. The player with the highest answer keeps both dominoes. If both players have the same answer, each keeps a domino. The winner is the player or team with the most dominoes when all dominoes have been picked up.

*Challenge put all your dominoes in order by amount from least to greatest.

Domino Keepers Subtraction

A game for 2 players (or two teams)

All of the dominoes are placed in the center face down. Both players pick up a domino at the same time. Each player tells the difference of the dots on their domino, e.g. $4-2=2$, $9-4=5$. The player with the smallest answer keeps both dominos. If both players have the same answer, each keeps a domino. The winner is the player or team with the most dominoes when all dominoes have been picked up.

Ordering Sums

Players choose 5 dominoes, turn them over, and add each side together. Order the sums from least to greatest or greatest to least. Find the Sum between the greatest and least number. The winner is the player with the greatest (or least) sum.

Ordering Differences

Players choose 5 dominoes, turn them over and subtract each side. Order the differences from least to greatest or greatest to least. Find the difference between the greatest and least number. The winner is the player with the least (or greatest) difference.

Even/ Odd Sort

Before the game starts, state a rule (even or odd). Add or subtract the dots on the dominoes then sort the answer by odd or even numbers. The player with the most even numbers or odd numbers wins the set.

Games to Play with a Deck of Cards

Place Value Number Battle

Players: 2 or more

Materials: Deck of cards with the face cards and 10s removed, Ace worth 1.

How to play: Players split a deck of cards and simultaneously flip over their top 3 cards to create a 3-digit number. Players may move the cards and place them in any position of the number they wish. The highest number wins all the cards. For example, player 1 draws 3, 1, 4 and makes the number 431. Player 2 draws, 4, 8, 7 and makes the number 874. Player 2 has the highest number and wins all 6 cards.

I Spy Sums

Players: 2

Materials: Deck of cards, Ace worth 11, Jack worth 12, Queen worth 13, King worth 14, scratch paper

How to play: Deal out the entire deck of cards in a 13 x 4 array (13 columns, 4 rows). One player challenges the other player to find 2 cards next to each other, either vertically or horizontally, that add to make a number by saying, "I spy two cards with a sum of 7." The other player looks for two cards that add to make the sum and removes them. Players swap roles. As large gaps appear, the size of the array may be reduced to help fill the gaps.

Give Me 10

Players: 2

Materials: Deck of cards with face cards removed, Ace worth 1

How to play: Deal 12 cards face up. Players take turns finding and removing combinations of cards that add up to 10. When both players agree that no more tens are possible, the next 12 cards are dealt face up.

*Challenge- Make 20 instead of 10.

Addition Number Battle

Players: 2

Materials: Deck of cards, face cards worth 10, Ace worth 1 or 11(players decide)

How to play: Players split a deck of cards and simultaneously flip over their top two and add the two cards together. The highest sum wins all the cards. If the cards have the same sum, the cards are placed in the center pile. The next hand is played normally and the winner takes all the cards.

Multi-Digit Subtraction Battle

Players: 2

Materials: Deck of cards with face cards and 10s removed, Ace worth 1

How to play: Players split a deck of cards and simultaneously flip over their top 3 cards. Make 2 of them into a 2-digit number and subtract the third. Players may move the cards and place them in any position of the number they wish. The greatest difference wins all the cards.

Addition Quick Draw

Cards are dealt out to the players. One player calls, "Draw" and both players turn over their top card and place it face up in the center. The players add the 2 numbers together and the first player to call out the total wins the two cards. After all cards have been used, the players count the number of cards that they have won. The winner is the person who has the most cards.

Ten or Twenty Math Game

Each player is dealt 5 cards to hold in their hand. The remaining cards are placed face down in a pile in the center. The top card is turned over and placed beside the pile. Players take turns to pick up the top card of the pile or the top card of the discard pile. If the player can make a set of 3 cards that total 10 or 20 in value, the set is laid down facing up in front of the player. The player finishes the turn by discarding a card face up on the discard pile. If the player has made a set of 3 on their turn they also pick up 3 more cards from the pile to restore their hand to 5 cards. The winner is the person who has made the most sets when all of the pile is gone.

Break the Bank at 27

Deal cards out equally to all players. The first player turns over their top card and places it in the center. The next player turns over their top card placing it on top of the first card. This player adds the value of the 2 cards and tells everyone the total. The next player does the same adding the value of their card to the previous total. Play continues until the total reaches 27 or over. The player that puts down the card that take the total to 27 or over takes all the cards in this pile. This player takes the cards and shuffles them into their pile. Play continues for a set time or until 1 player has no cars left. The winner is the person with the most cards.

*Challenge: Play Break the Bank at 50 or 100.

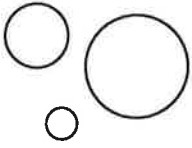
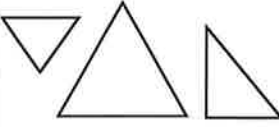

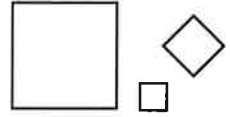
Tens Go Fish

Players: 2-4

Play like Go Fish. Except you are making matches of 10. For example, "I have 2. Do you have 8 to make 10?"

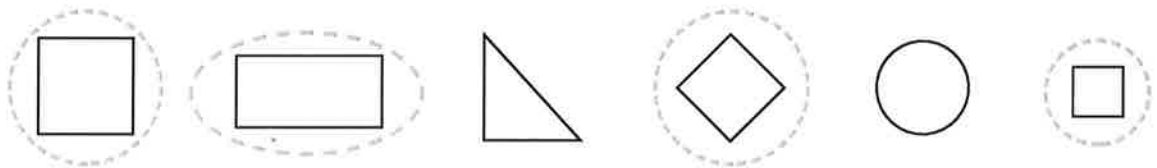
Name _____

Sort Two-Dimensional Shapes

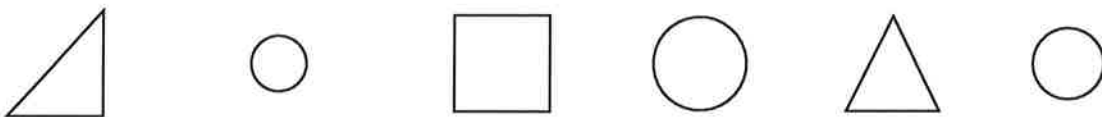
 <p>Circles are curved and closed.</p>	 <p>Triangles have 3 sides and 3 vertices.</p>	 <p>Rectangles have 4 sides and 4 vertices.</p>	 <p>A square is a special kind of rectangle.</p>
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Read the sorting rule. Circle the shapes that follow the rule.

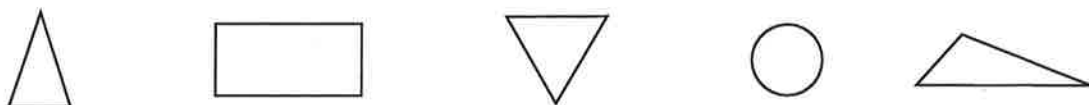
1. 4 sides



2. curved and closed




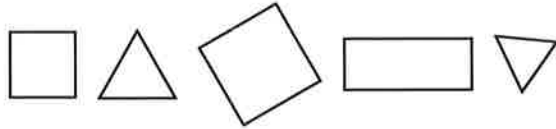
3. 3 vertices



Name _____

Shape Groups

Cross out the shapes that do not belong.

<p>1. We have 4 vertices. We have 4 sides. All of our sides are the same length.</p>	
<p>2. We have more than 2 sides. We do not have 4 sides.</p>	

Draw a shape to solve.

<p>3. I have 3 vertices. I have 3 sides.</p>	
<p>4. I have 4 sides. I have 4 vertices. My sides are not all the same length.</p>	

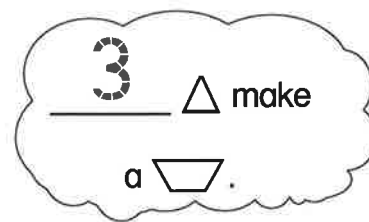
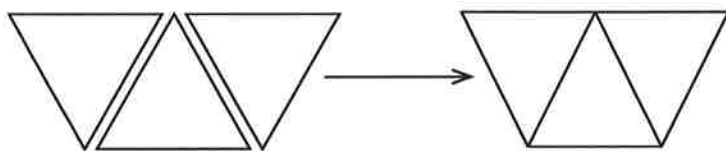


Writing and Reasoning Draw two different shapes that have 4 vertices and 4 sides.

Name _____

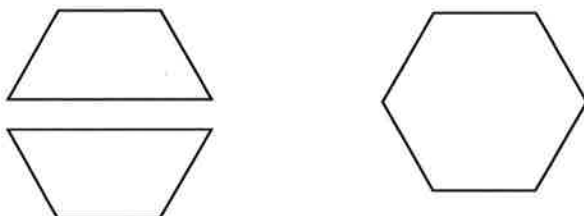
Combine Two-Dimensional Shapes

You can put shapes together to make a new shape.



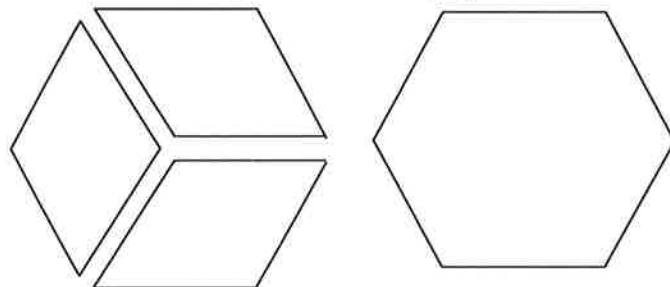
Use pattern blocks. Draw to show the blocks.
Write how many blocks you used.

1. How many  make a  ?



_____  make a .

2. How many  make a  ?


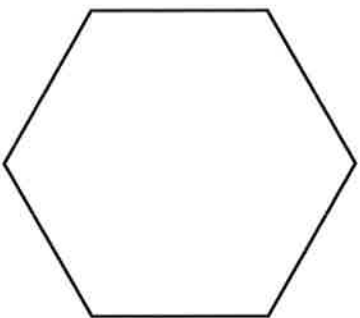

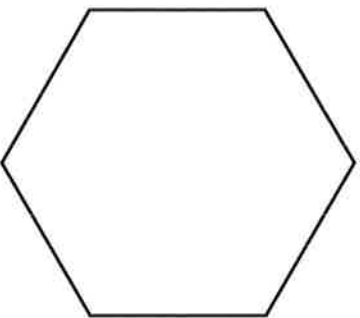



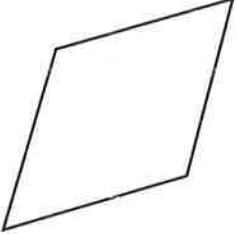


_____  make a .

Name _____

Shape Maker

Use pattern blocks. Draw lines to show how to make each shape.

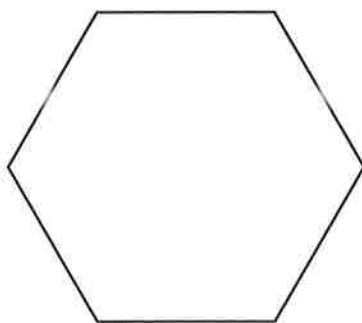
<p>1. Use .</p> 	<p>2. Use .</p> 
<p>3. Use .</p> 	<p>4. Use .</p> 



Writing and Reasoning

Draw lines to show

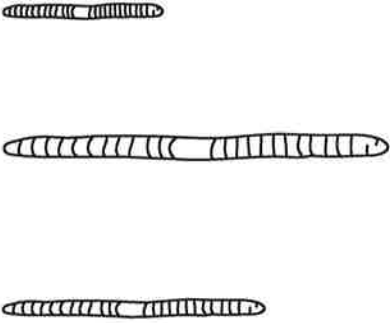
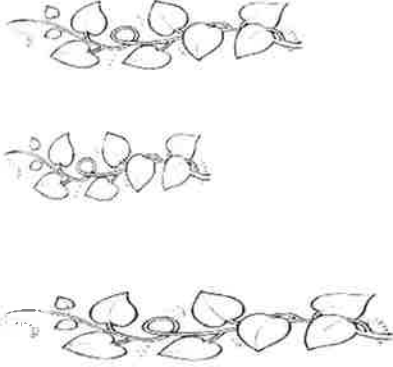
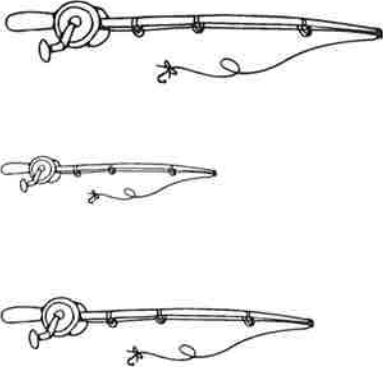
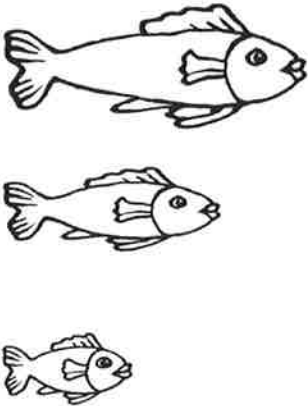
how this  can be made from 3  and 1 .



Name _____

Shortest and Longest

Order by length. Write 1, 2, or 3.

<p>1. Order from shortest to longest.</p>  <p>_____ 1 _____ _____ 3 _____ _____ 2 _____</p>	<p>2. Order from longest to shortest.</p>  <p>_____ _____ _____ _____ _____ _____</p>
<p>3. Order from longest to shortest.</p>  <p>_____ _____ _____ _____ _____ _____</p>	<p>4. Order from shortest to longest.</p>  <p>_____ _____ _____ _____ _____ _____</p>






Writing and Reasoning Draw three objects in order from **longest** to **shortest**.

Name _____

Party Time Picture Graph

Follow the directions to complete the picture graph.


1. Jill has 5 .
 She has 3 more  than .
 She has 2 more  than .

Jill's Party Supplies										
 hats										
 balloons										
 bags										



Each ○ stands for 1 item.

There will be 8 children at Jill's party.

Use the picture graph to answer each question.

2. Does Jill have a  for each child? Circle.

yes no

3. Each child gets one .
 How many more  does Jill need?

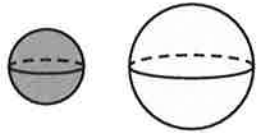
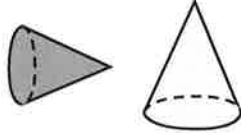
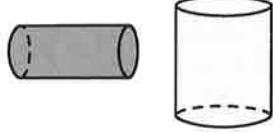
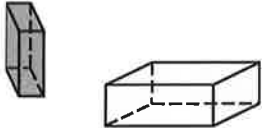
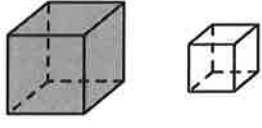
_____ more 

 **Writing and Reasoning** Jill gets 1 more .

Will she have a bag for each child? Explain.

Name _____

Three-Dimensional Shapes

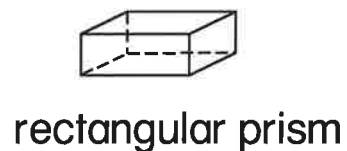
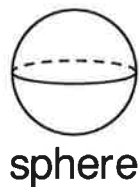
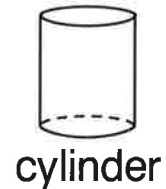
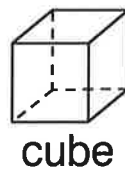
<p>curved surface</p>  <p>sphere</p>	<p>curved and flat surfaces</p>  <p>cone</p>	<p>curved and flat surfaces</p>  <p>cylinder</p>
<p>flat surfaces</p>  <p>rectangular prism</p>  <p>cube</p>		

Color to sort the shapes into three groups.

1. only **flat surfaces** 

2. only a **curved surface** 

3. both **curved** and **flat surfaces** 

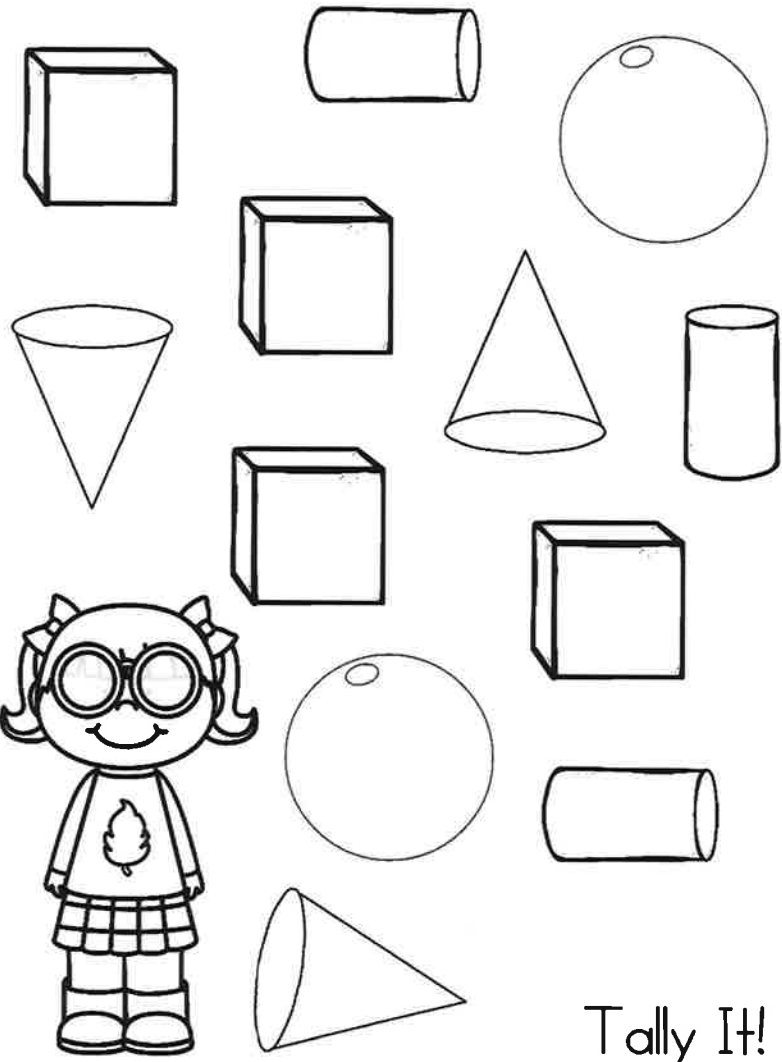


Graphing Shapes

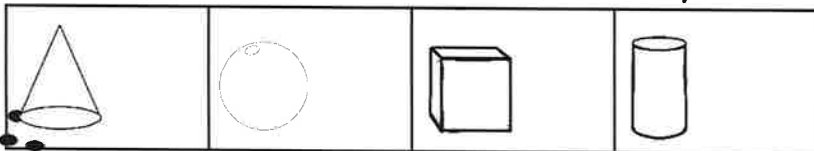
Count the number of each shape. Color in a box on the graph above the correct shape. Tally

Name _____

How Many Shapes?

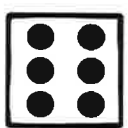
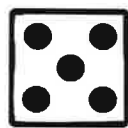
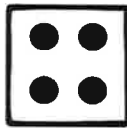
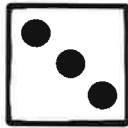
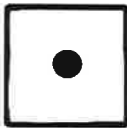


Tally It!

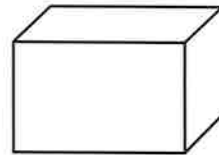
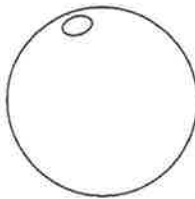
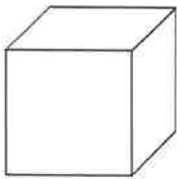


Name _____

Roll a Shape



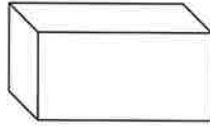
Roll a dice. Draw
a shape on the
chart that
matches the
number you rolled.



Free
Choice

Name: _____

I can build a



using

and



marshmallows

toothpicks

Build a Rectangular Prism

Draw it!

marshmallow

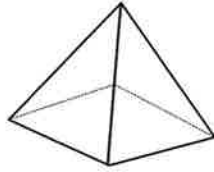
vertices

toothpicks

sides

Name: _____

I can build a



using

and



marshmallows

toothpicks

BUILD A PYRAMID

Draw it!

marshmallows

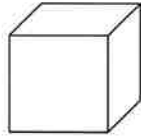
vertices

toothpicks

sides

Name: _____

I can build a



using

and



marshmallows

toothpicks

Build a Cube

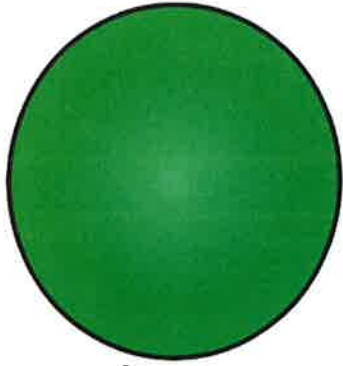
Draw it!

marshmallows

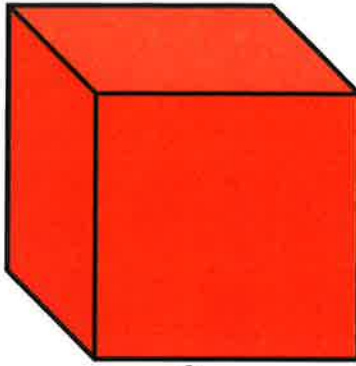
vertices

toothpicks

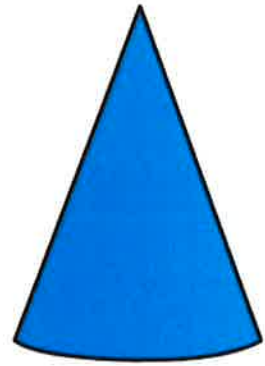
Sides



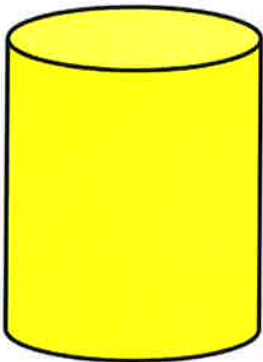
sphere



cube



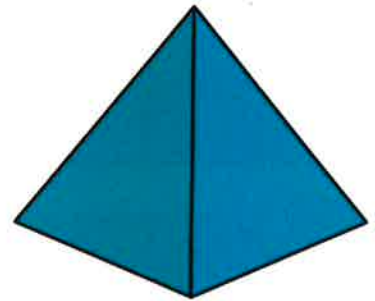
cone



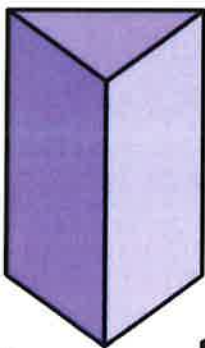
cylinder



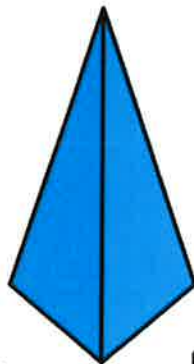
rectangular
prism



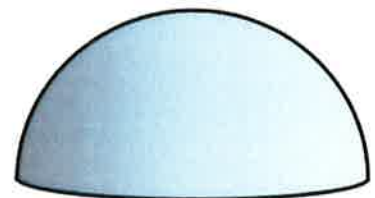
pyramid



triangular
prism



triangular
pyramid



hemisphere