

Name _____

The World's Greatest

E 6-1
NUMBER SENSE

World's sleepest animal

1. A koala sleeps about 20 hr each day.
How many hours does it sleep
in the month of June?
- _____

| | | |
|-----------|---|------------|
| 1 min | = | 60 sec |
| 1 hr | = | 60 min |
| 1 month | = | 28–31 days |
| 1 year | = | 12 months |
| 1 decade | = | 10 years |
| 1 century | = | 100 years |

World's Number 1 milk drinking country

2. Each person in Ireland drinks about 700 c of
milk each year. How many cups would each
person drink in 5 decades?
- _____

World's fastest orbiting planet

3. Mercury orbits the sun in 88 days. The planet
travels about 30 mi in 1 sec. How far does the
planet travel in 1 min?
- _____

World's busiest airport

4. Hartsfield Atlanta International Airport in Georgia
has about 2,000 airplanes depart and arrive each
day. How many times do planes land and take
off in April?
- _____

World's coldest populated place

5. Norilsk is a small city in central Russia. The average
temperature is 12.4°F. The city has 5 months
without sunlight each year. How many months
without sunlight occur in 1 century?
- _____

World's heaviest land mammal

6. The African elephant weighs about 14,000 lb. It
eats about 50,000 lb of twigs, foliage, grasses,
and fruit in 3 months. How many pounds of
food does it eat in 1 year?
- _____

Name _____

Vacation Estimation

E 6-2
ESTIMATION

Mileage Between Cities

| | Miami | New York City | Pittsburgh | Washington, D.C. |
|------------------|-------|---------------|------------|------------------|
| Miami | — | 1,328 | 1,250 | 1,101 |
| New York City | 1,328 | — | 386 | 229 |
| Pittsburgh | 1,250 | 386 | — | 241 |
| Washington, D.C. | 1,101 | 229 | 241 | — |

It is 9:00 A.M. Your family vacation starts in New York City with a final destination in Miami, Florida. You travel 58 mi every hour if you do not stop for meals or attractions. You first head to Washington, D.C.

1. You must stop for a 1 hr lunch at noon. Use rounding to estimate how many miles you have traveled by noon.

2. Estimate how far away you are from Washington, D.C.

3. You arrive in Washington, D.C. You do some sightseeing, and at 5:00 P.M. you continue your trip and drive until 7:00 P.M. You stop for dinner and rest for the evening. Estimate how many miles you have driven for the day.

4. Your family starts the second day at 9:00 A.M. and drives until 8:00 P.M. During that time, you stopped for 2 hr. Estimate how far you traveled for the day.

5. Estimate how far you are from Miami.

6. On the third day, about what time must you leave in the morning to get to Miami around 5:00 P.M.? Remember, you will stop for a 1 hr lunch.

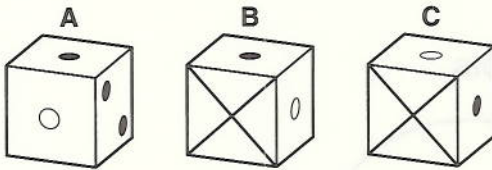
Name _____

Crazy Cubes

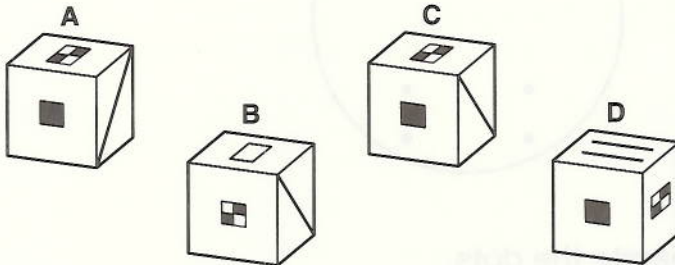
E 6-3
VISUAL THINKING

Write the letter of the cube that is not the same as the others in the group.

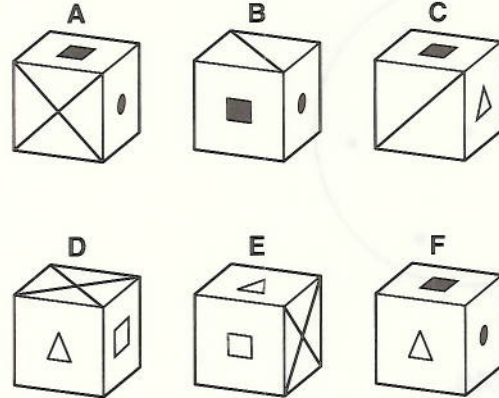
1.



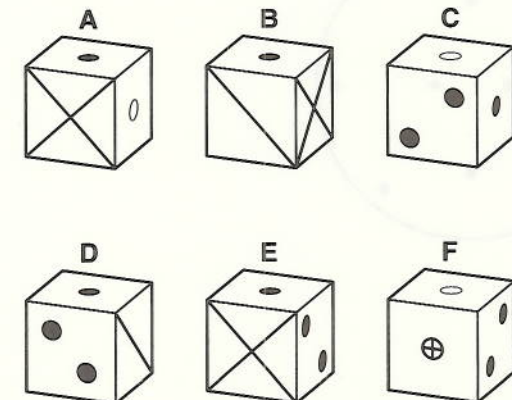
2.



3.



4.



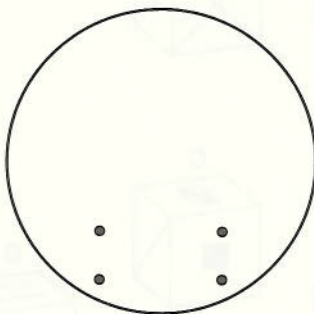
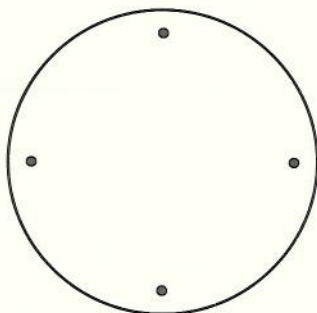
Name _____

Separate the Dots

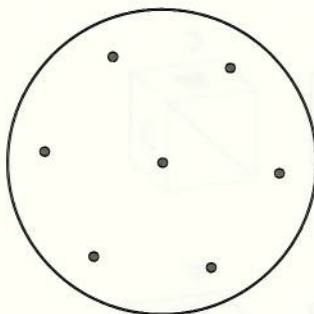
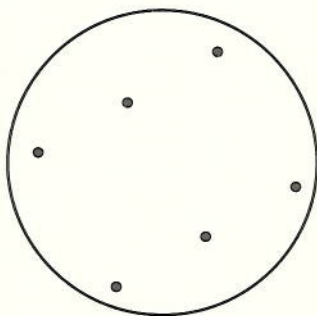
E 6-4
VISUAL THINKING

Draw line segments inside each circle so that each dot is in a separate area. The 2 ends of each line segment must touch the circle.

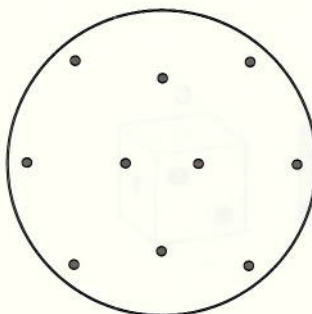
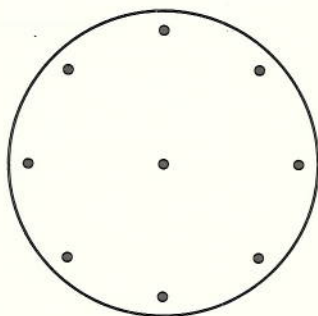
1. Draw 2 line segments to separate the dots.



2. Draw 3 line segments to separate the dots.



3. Draw 4 line segments to separate the dots.



Name _____

Food for Thought

E 6-5
DECISION MAKING

You work at a pet shop. One of your jobs is to feed all the animals. Answer the questions below.

First thing in the morning you feed the fish. The 12 fish tanks have 26 large fish. You can choose between two kinds of pellets.

Daily Feeding Chart

| | |
|----------------|-----------------------|
| Fish | 10 super pellets each |
| | or |
| | 21 mini pellets each |
| Puppies | 16 oz dry food each |
| | or |
| | 14 oz wet food each |

1. Which kind of pellets do you choose? Estimate the number of pellets you need. Explain your method.

2. What is the exact amount?

You feed the puppies next. There are 10 cages of large-breed puppies. Each cage can hold 3 puppies, but 2 of the cages only have 2 puppies each. You need to decide which food to give the puppies.

3. What kind of puppy food do you choose? Estimate the amount of puppy food you need. Explain your method.

4. What is the exact amount?

Name _____

Treasure!

E 6-6
REASONING

Benjamin is a treasure hunter. He and his crew recently found the treasure of a sunken ship from the past. The chests contained gold, silver, and jewels.

Treasure Found

| Type of Chest | Weight of Each Chest | Number of Each Chest |
|---------------|----------------------|----------------------|
| Gold | 178 lb | 58 |
| Silver | 153 lb | 53 |
| Jewels | 123 lb | 29 |

Benjamin's ship can carry a maximum weight of 10,000 lb without sinking.

1. What is the total weight of the gold chests? _____
2. What is the total weight of the silver chests? _____
3. What is the total weight of the jewel chests? _____
4. How many trips does Benjamin need to take to carry all of the chests to shore? How do you know?

5. Suppose Benjamin only carries gold chests on his last trip. If Benjamin carried full loads on the first two trips, about how many gold chests will he carry on the last trip?

Name _____

The Skateboard Business

E 6-7
DATA

Dave is interested in the skateboard business. He found out the following information about some companies that produce skateboards.

Skateboard Manufacturers

| Manufacturers | Daily Production | Days of Operation |
|-------------------------|------------------|----------------------------|
| Big Z Skateboards | 4,240 | Tuesday through Saturday |
| California Super Boards | 3,892 | Closed on Sundays |
| Rocket Rides | 3,725 | Open every day of the year |
| Wonder Wheels | 5,000 | Monday through Thursday |

Solve the problems below using mental math, paper and pencil, or calculator. Tell which method you used.

1. Which company manufactures the most skateboards in 2 days? How many skateboards does that company make?

2. Starting on Monday, which company will make more skateboards in 5 days, Big Z or California Super Boards? Write the total number each company will make.

3. Starting on Friday, which company will make the most skateboards in 10 days? Write the total number all of the companies will make.

Name _____

Bogus Bucks

E 6-8
NUMBER SENSE

Rosa deciphers codes. A bank has hired her to crack the codes on 7 safes. The codes also tell the amount of money in each safe.

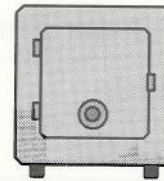
Decipher the codes using the following information:

A = 1, B = 2, C = 3, and so on.

Use the clues below to find out how much money is in each safe. Write each amount on the correct safe.

Clue 1: $\$0.80 \times BC$ is on top

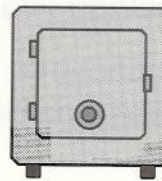
1.



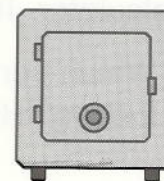
Clue 2: $\$2.10 \times FA$ is below left of $\$0.80 \times BC$

Clue 3: $\$3.45 \times AG$ is right and 2 above $\$6.09 \times H$

2.



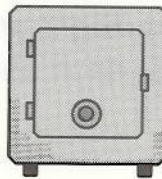
3.



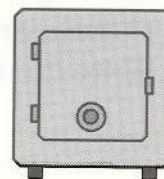
Clue 4: $\$4.61 \times BI$ is above and left of $\$1.78 \times DE$

Clue 5: $\$5.55 \times CC$ is right and above $\$6.09 \times H$

4.



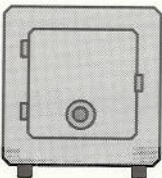
5.



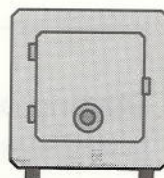
Clue 6: $\$6.09 \times H$ is 2 safes below $\$2.10 \times FA$

Clue 7: $\$1.78 \times DE$ is below and right of $\$4.61 \times BI$

6.



7.



Name _____

Fun For Eight, Eight For Fun

E 6-9
NUMBER SENSE

The Amazing Zellmar calls you up to the stage.

- He wants you to think of a number between 1 and 20.
- He tells you to multiply the number by 2.
- Now add 8 to the number.
- Amazing Zellmar says to divide or split the result in half.
- He tells you to subtract the original number from your answer.
- Now he says to take that number and multiply it by 111.
- Finally, he tells you to take your answer and multiply it by 11.

1. Zellmar says to look at the title of this page. How does it relate to the answer to the problem you just did?

2. Why do you think everyone got the same answer?

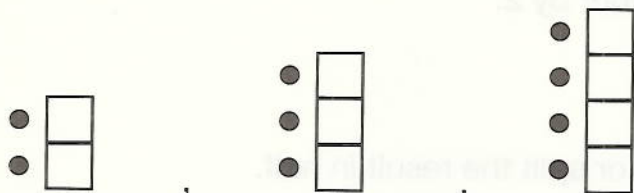
Name _____

Next?

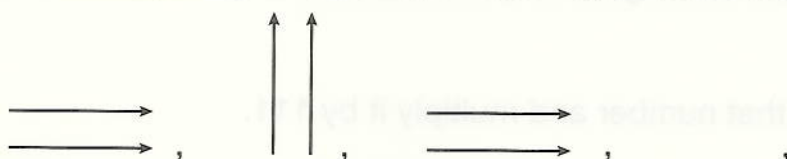
E 6-10
PATTERNS

Draw the next two shapes to continue the pattern.

1.



2.



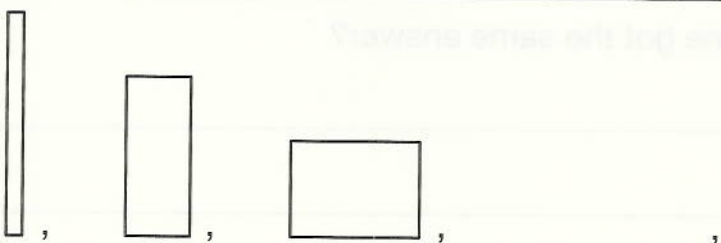
3.



4.



5.



6.

