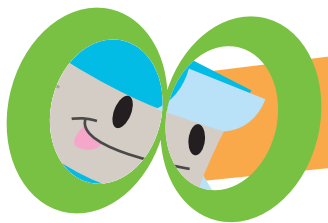


Lesson 1

Numbers Large and Small



Let's Explore

Exploration 1: Create Large Numbers

Materials: 2 sets number cards (0 - 9)

1. Mix the card sets and place them face down in a stack. Draw three cards and place them in random order.

Write the number in Place Value Chart A.

A.

Place	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Value							

Can you rearrange the three cards to make it a larger number? If so, rearrange the cards and then write the number beside your original answer for number 1.

2. Draw one card from the stack and place it at the end of the three digit number. Write the number in Place Value Chart **B**.

B.

Place	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Value							

What place could you have put it in to make the largest possible number?

Rearrange the numbers and then write the number beside your original answer for number 2.

3. Draw one card from the stack and place it at the end of the four digit number. Write the number in Place Value Chart **C**.

C.

Place	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Value							

What place could you have it in to make the largest possible number?

Rearrange the number and then write the number beside your original answer for number 3.

4. Put all of the cards back together. Using all of the cards choose the five that will make the largest five digit number. Place them in the correct order and then write the number in Place Value Chart D. Label all of the place values also.

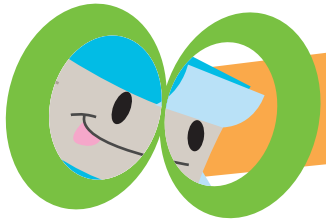
D.

Place	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Value							

5. Put all of the cards back together. Using all of the cards choose the five that will make the smallest five digit number. Place them in the correct order and then write the number in Place Value Chart E.

E.

Place	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Value							



Let's Explore

Exploration 2: Large Numbers and Place Value

Materials: Magazine of your choice, Scissors, Tape or glue

Use the magazine to answer the following problems:

1. Find a number with three digits. Cut it out and glue or tape it to this page. Circle the number in the tens place.

2. Find a number with four digits. Cut it out and glue or tape it to this page. Circle the number in the thousands place.

3. Find a number with four digits. Cut it out and glue or tape it to this page. Circle the number in the hundreds place.

4. Find a number with four digits. Cut it out and glue or tape it to this page. Circle the number in the ones place.
5. Find a number with five digits. Cut it out and glue or tape it to this page. Circle the number in the tens place and underline the number in the ten thousands place.



For 1 - 4: Write each of the following numbers in standard form.

1. 347197

2. 9068327

3. 208574

4. 1749073

For 5 - 9: Write each of the following numbers in standard form:

5. two million four hundred fifty-two thousand nine hundred twenty-six

6. three hundred sixty-two thousand four hundred eighteen

7. one million two hundred eighty-eight thousand two hundred forty-one

8. eight million three hundred seventeen thousand four hundred ninety-three

9. five hundred twenty-one thousand six hundred twenty-eight

10. Complete the table with the value of each place.

Place	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Value							

11. Describe in words the pattern of the values in the table.

12. Each digit's value is _____ times the value of the number to the right of it.
- A. 100
 - B. 10
 - C. 1 000 000
 - D. 1 000
13. Where would you most likely find a large number in print? _____
- A. a recipe
 - B. the score at a hockey game
 - C. 2006 Census of Canadian population
 - D. kilometres you drive to visit your family in the next city
14. Write an estimate of:
- A. How many students that you think attend your school? _____
 - B. How many people live in your city? _____
 - C. How many people live in your province? _____

For 15 - 20: Using a current magazine or newspaper, find large numbers that fit the following descriptions, and name their source.

15. Find a number whose hundred thousands place is a digit from 3 to 7. Underline the hundred thousands place.

Description _____ Number _____

Source: _____

16. Find a number with a millions place that has a digit from 8 to 10. Underline the millions place.

Description _____ Number _____

Source: _____

17. Find a number with a ten thousands place with a digit from 2 to 5. Underline the ten thousands place.

Description _____ Number _____

Source: _____

18. Find a number that has a value greater than 100 000.

Description _____ Number _____

Source: _____

19. Find a number that has a value less than 1 000 000 and greater than 600 000.

Description _____ Number _____

Source: _____

20. Find a number that has a value greater than 10 000 and less than 100 000.

Description _____ Number _____

Source: _____

21. Reflect: Write a number that is over 100 000. What is the place value of each digit?



For 1 – 4: Write the number represented by the expanded notation:

1. $600 + 30 + 8$

2. $800 + 10 + 1$

For 3 – 5: Write the following numbers in expanded notation:

3. $496 =$ _____

4. $831 =$ _____

5. $702 =$ _____

