Numbers & Operations

Many of these stations have been designed as an assessment tool for the objectives of the new curriculum. However, teachers may choose to use these as introductory activities, practise activities or centre activities.

These stations lend themselves well to the adaptive dimension of the Core Curriculum. See The Adaptive Dimension in the Core Curriculum available in all schools. The document can be ordered from the Book Bureau (#1655). Changes can be made to the context or to the level of difficulty to adapt to the individual needs in your classroom.

Similar stations can be created by using activities from textbooks and other resources. Binders that accompany manipulatives are an excellent source of ready-made activities.

A few excellent resources are:

Name	Distributor	Where to Order	Order #	Cost
101 Winning Ways Base Ten Blocks 4-6 (good for low achievers and special needs) (Active Learning Series)	Exclusive	Book Bureau	6024	$31.65
Pattern Blocks 6-8 (Active Learning Series)	Exclusive	Book Bureau	7179	$29.85
The Geoboard Collection 7-9 (Active Learning Series) Check catalogue for newer version.	Exclusive	Book Bureau	0089	$31.00
Fraction Blocks (Active Learning Series) (good for reteaching)	Exclusive	Book Bureau	7172	$32.00
Activities for Fraction Circles (3-8) (Creative Publications)	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-88488-942-4	$35.70
Connections Grade 7 Also recommended for Geo/Measurement (Creative Publications)	Addison-Wesley Publishers	Addison-Wesley Publishers	SC5-0-56107-057-2	$30.75

Getting ready . . .

Station 1 Record the following numbers on an audio-cassette.
Be sure to read clearly, slowly repeating each number 3 times.

a)	9346	b)	800 008
c)	259	d)	6900
e)	202 240 273	f)	3 billion
g)	937.123	h	one hundred and one thousandths
i)	6 tenths	j)	12 million, 6 thousand six
k)	one eighth	l)	3 ten thousandths
m)	35 hundredths	n)	111 thousand one hundred sixty one

Add any other number that you wish..

NOTE: 1. We do not use "and" as we read larger numbers.
"one hundred two" **NOT** "one hundred <u>and</u> two"

2. **NO commas!** "2000" and **NOT** "2,000"

3. 2000 but we use spaces for more digits - 20 000

This station is an excellent way to test students on large numbers without taking hours of the teacher's time. Students sometimes have difficulty with large numbers and this is a good way to let them hear and write what they hear.

On the other side of the card, write several numbers that you wish students to read orally on cassette.

Station 2 Make place value cards. | two hundred | | forty | | seven |

Place the cards that represent each number in a separate envelope.
On the envelope write the number and the statement:

89 247: The missing card is [ ]

On their answer sheets students should write:

"The missing number is eighty nine thousand".

**Station 3** Make cards as above using decimal numbers.

Station 4 Make cheque books using the following check blank:

Student writing: Invent name of bank, location, account number and add to check.

BILLS: make some or use some that you have that would be appropriate.

Cheque #

19

Pay to the
order of

$

DOLLARS
100

Signature

Station 5 Great way to integrate the resource centre with mathematics.

Station 6 Use thin drinking straws for uprights.

Cut these straws about 15 cm in length.

Use larger drinking straws for the beads. (Straws from McDonalds work well and all you need to do is ask for straws and they are usually very generous. Larger drinking straws are sometimes available at other fast food outlets or at department and at bargain stores.)

Cut them into 1-1.5 cm pieces.

Insert long thin straw into a small piece of plasticine.

Store each set in self sealing plastic bags.
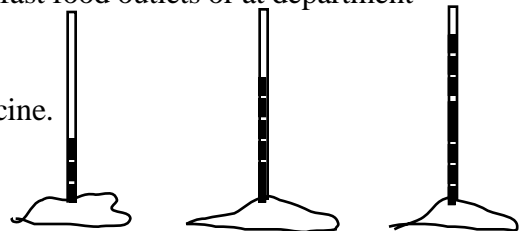
Station 7 This station helps students make the connection between math and other curricular areas. Most of the equipment is available in the science lab.

Station 8 This station integrates a grade seven science unit and geography. Encourage students to "surf the net" if it is available.

Station 10   Number tents are made with construction paper.

$$\boxed{6 \quad 7 \quad 0 \quad 3}$$

$$\boxed{6 \; 0 \; 0 \; 0} \; + \; \boxed{7 \; 0 \; 0} \; + \; \boxed{0 \; 0} \; + \; \boxed{3}$$
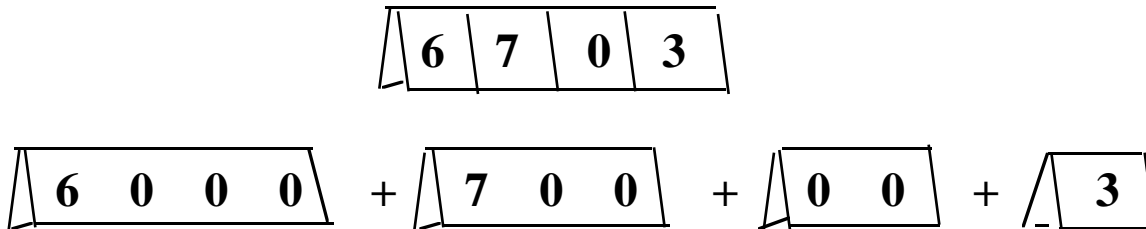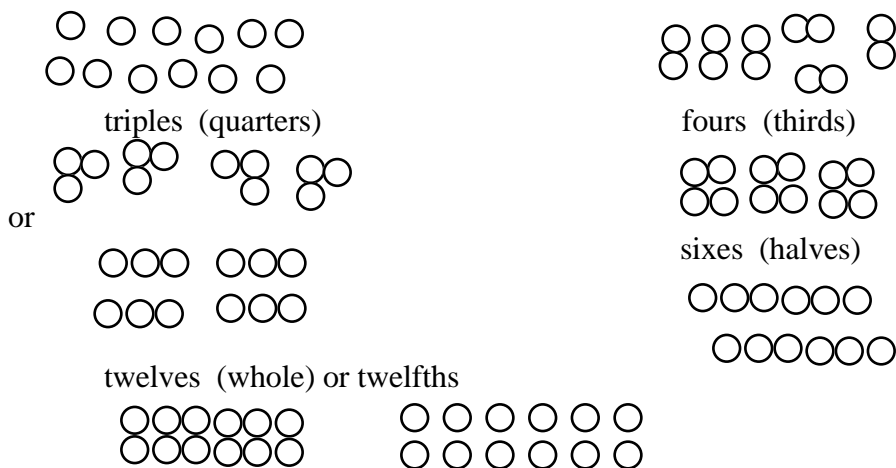
1. Cut construction paper and fold in half.
2. Make 10 of each size.
3. Label 0 to 9 on the smaller tents, 00 to 90 on the the next size, 000 to 900 on the third larger size and so on to 1 000 000.
4. Students can build numbers that are written on cards or they can take apart the tents to express numbers in expanded form.
5. For special needs students use a different color for each size.

Station 14   Used decks of cards can be obtained from casinos free of charge. These are great for generating numbers for all the operations.

Station 15   Decide what ratio to use for the colors of blocks. Blanks have been left on the activity card to allow you to use the cubes that are available in your school.

Station 18   Please be conscious of the sensitivity of some students at this age level regarding the measurement of body parts

Station 19   To prepare egg cartons: Use several cartons cutting one of each like the following:

singles (twelfths)   doubles (sixths)

triples (quarters)   fours (thirds)

or

sixes (halves)

twelves (whole) or twelfths

Differentiate each fraction by painting each one a different color.
You can also place a different color dot on each with a felt marker.

Station 20   This station will appeal to the musical learners. It can be extended as a project for the gifted musical student.

Station 21   See station 19 for directions to make the egg cartons. The page with the fraction strips follows the station card 21.

Isle   Mathecos

Deep Blue Sea

Triangular Plane
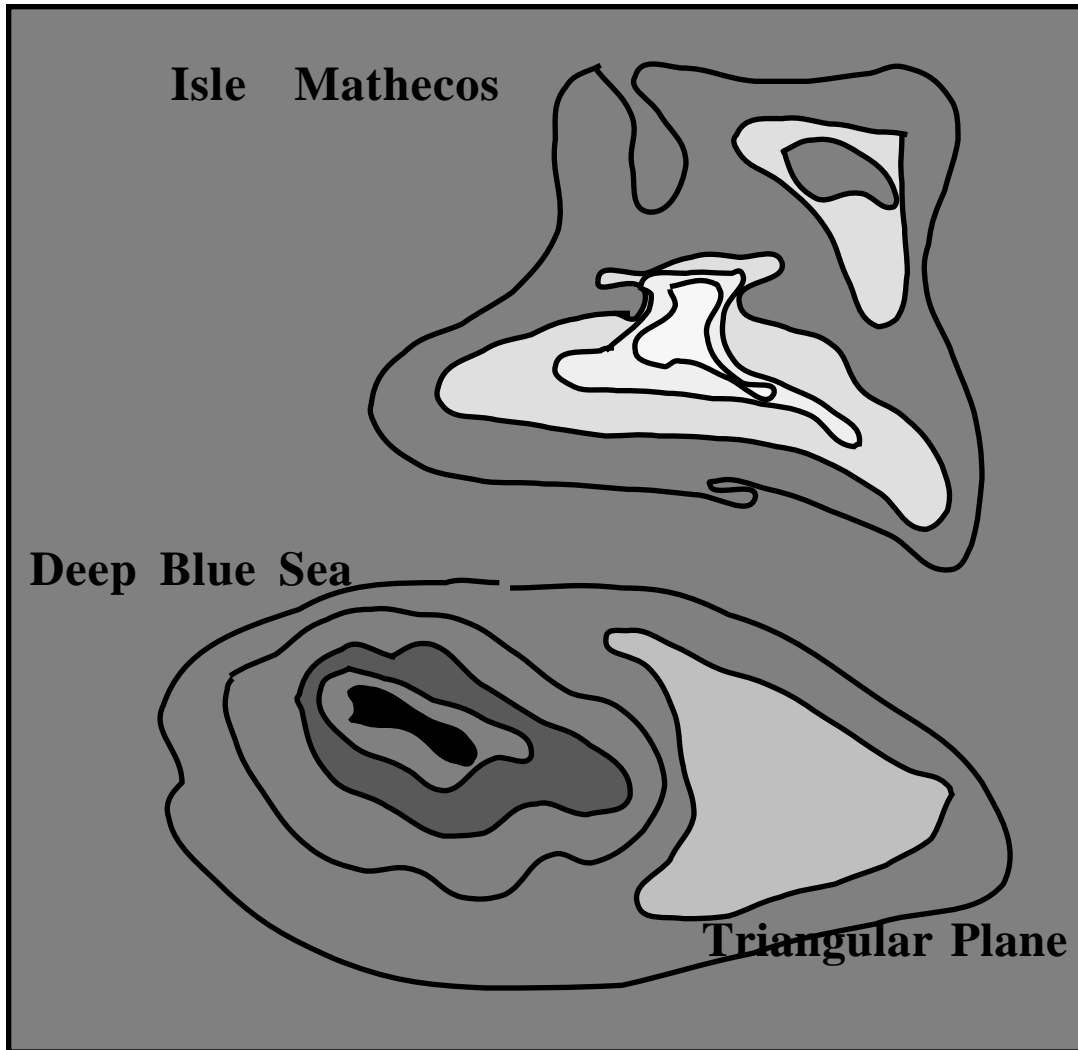
	4000 m above sea level
	3000 m above sea level
	2000 m above sea level
	1000 m above sea level
	500 m above sea level
	200 m above sea level
	sea level
	200 m below sea level
	500 m below sea level
	1000 m below sea level

Numbers & Operations   Station 14

1.   **Circle the greatest number:**

1. ———————————   2. ———————————   3. ———————————

4. ———————————   5. ———————————   6. ———————————

7. ———————————   8. ———————————   9. ———————————

2.   **Integers in ascending order:**

1. ————————————————————

2. ————————————————————

3. ————————————————————

4. ————————————————————

5. ————————————————————

3.   **Label the number line:**

0
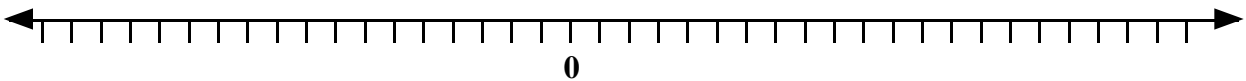
4.   **Write the next three integers in each pattern**

a)   -7, -5, -3, ——— ——— ———

b)   +4, +3, +2, ——— ——— ———

c)   +2, -3, +3, -4, ——— ——— ———

d)   +2, +4, +16, ——— ——— ———

e)   +6. +3, 0, ——— ——— ———

5.   **Which integer is**

a)   **two less than -1?** ——————   **b)**   **three more than 0?** ——————

c)   **four more than -5?** ——————   **d)**   **five less than +3** ——————

e)   **two more than the opposite of +6?** ——————

6.   **Use < or > to make up four statements that are true with integers.**
Ex: -1 < 0

1. ————————   2. ———————— 3. ———————— 4. ————————

Numbers & Operations
Fraction Strips