

22. Numbers & Operations

Decimals
N-60, N-61a

Gr. 6

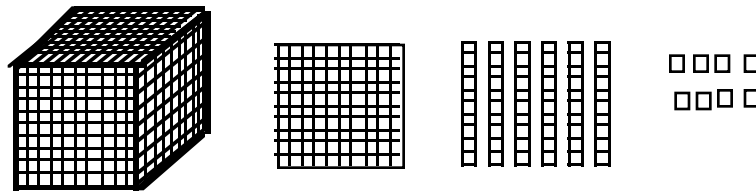
Materials: base ten blocks
(large cubes can be made using 10 flats (hundreds))
base ten rubber stamps

1. Use the large cube to represent 1 whole.

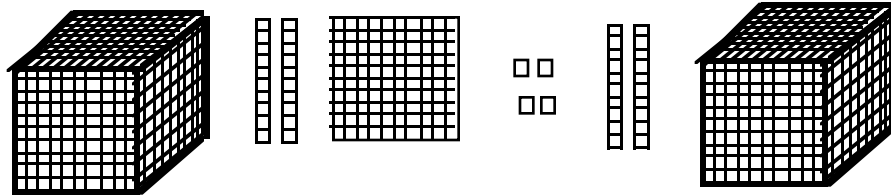
- What do the flats represent in this case?
- What do the rods represent in this case?
- What do the units represent in this case?

2. Construct the following with base 10 blocks where the large cube is one and record the number.

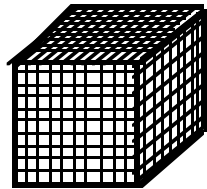
a)



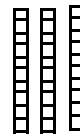
b)



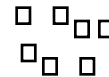
c)



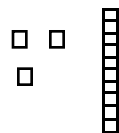
d)



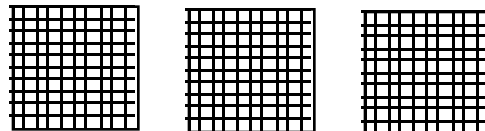
e)



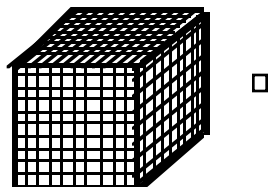
f)



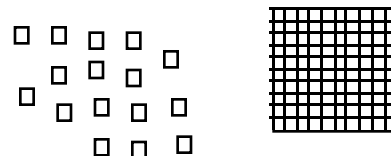
g)



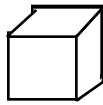
h)



i)



3. **Build the following with base ten blocks. Record by using base ten rubber stamps or use these sketches:**



one



tenths



hundredths



thousandths

- a) **3.156** b) **1.046** c) **0.003**
- d) **2.400** e) **0.273** f) **1.305**

4. a) **Write the decimal numbers in each of numbers 2 and 3 in order of increasing size.**
- b) **Explain the strategy that you used.**

When you have completed this station,
place your base ten blocks in their containers
and answer sheet in your portfolio.
Label your portfolio entry.

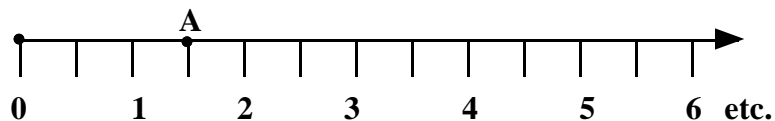
Please tidy up the station.

23. Numbers & Operations

Decimals Gr. 6
N-60, N-61a, b, & c

Materials: ruler

1. a) Make a line that measures 27cm. Make a dot at the beginning and an arrow at the end.
- b) Make a mark to indicate each cm and label as follows:



- c) Place the letter that is in front of each decimal number to show its location on the number line. An example of the first one is modelled on the above number line.
A. 1.5 B. 5.3
C. 9.09 D. 5.50
E. 0.4 F. 6.990
G. 7.8 H. 0.99
2. Suppose you wanted to write 5.3, 2.3, 5.03 and 5.23 in order of increasing size. Explain how you could use the
 - a) the number line you just made
 - b) the place value of each digit

When you have completed this station,
place your number line and the answer sheet in your portfolio.
Label your portfolio entry.

Please tidy up the station.

24. Numbers & Operations

Decimals Gr. 6
N-10, N-59,
N-62, N-66

Materials: calculator

Lindsay has \$30.00. She is shopping for Christmas presents early in the fall during a sale. She wants to buy a book in the Forgotten Realms series for her mother for \$6.65, an apron and oven mitts for her step father for \$9.95, a Lego toy for her baby sister for \$5.99 and three stocking stuffers for \$.89 each.

- 1) Estimate to see if she has enough money.
Explain your strategy.

- 2) Use a paper and pencil to show your work to calculate the exact amount to see if she has enough money.

- 3) Use a calculator to determine if she has enough money.
Write the keys that you used:

6.65 9.95 etc.

- 4) Discuss the advantages and disadvantages of each of the above methods.

- 5) Which method are you likely to use
 - a) at home the night before the actual purchase
 - b) at the store at the time of the purchase
 - c) in the car on the way to the store

When you have completed this station,
place your answer sheet in your portfolio.

Shut the calculator off.

Label your portfolio entry.

Please tidy up the station.

25. Numbers & Operations

Integers Gr. 6
N-33, N-34

- Materials:** thermometers
construction paper
containers with water
- hot water
 - warm water
 - water at room temperature
 - cool water
 - ice water (with ice cubes)
 - salted ice water (with ice cubes)

- Place a thermometer in each of the containers of water and leave for several minutes as you work on this station.
- Design an elevator panel for an apartment building that has 15 floors above ground level and three below ground level. The first floor below ground level is a parkade while second floor below ground level is a health spa and the third floor below ground level is a shopping centre. (There is no 13th floor!)

On the other side of your panel list all the names that you gave each floor and write their integral equivalent (positive and negative numbers).

- Look at the temperature indicated by each thermometer in your first activity and make a table to record the measure.

water	temperature
a. hot water	
b. warm water	
c. water at room temperature	
d. cool water	
e. ice water (with ice cubes)	
f. salted ice water (with ice cubes)	

When you have completed this station,
place your answer sheet in your portfolio.
Dry the thermometers and store them in their container.
Label your portfolio entry.

Please tidy up the station.

26. Numbers & Operations

Integers Gr. 6
N-33, N-34

Materials: atlas

1. Find a relief map of Western Canada or other areas. Find several examples of levels that are above and below sea level. Record these as integers (positive and negative numbers)
2. Write the integer for each of the following statements:
 - a) The temperature dropped 10° .
 - b) She received a gift of \$25.00.
 - c) He lost 10 kilograms.
 - d) The airplane gained 500 metres of altitude.
 - e) The offence of the football team gained 16 yards.
 - f) Alice deposited \$45.00 dollars in her savings account.
 - g) Death valley in the United States is 86m below sea level.
 - h) You owe your brother \$24.00.
 - i) George visited his Grandparents on the sixteenth floor.
 - j) Sally's temperature went up 3° in one hour.
3. Make up 10 situations to represent integers and write the integer that each statement represents.

When you have completed this station,
place your answer sheet in your portfolio.
Label your portfolio entry.

Please tidy up the station.