## Place Value, Rounding, Ordering, Patterning

a) What number is modeled in the place-value chart below?

| $\begin{aligned} & \text { o } \\ & \text { O } \\ & 0 \\ & 0 \\ & \text { O } \\ & \text { ㄷ } \end{aligned}$ | $\begin{aligned} & \text { O } \\ & \frac{D}{D} \\ & \frac{0}{0} \\ & \frac{C}{S} \\ & \hline \end{aligned}$ | $\stackrel{\sim}{\stackrel{\sim}{\square}}$ | 0 0 0 | $\frac{\infty}{\stackrel{\infty}{؟}}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |

Answer: $\qquad$
b) Round each of the following numbers to the nearest hundred.

| i) |  | ii) |  | iii) |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

c) Write each group of numbers in order from the least to the greatest.

ii)
d) Complete the pattern in the following number lines by filling in the missing numbers.


|  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Fractions, Greater Than/ Less Than, Tally Chart

a) Shade the models to show the correct fractions below.
i) Fraction =

ii) Fraction =

iii) Fraction = $\square$

b) Place either $a$ > or < symbol between the following pairs of fractions or decimals to indicate which is greater.
i)

ii)
 iii) iv) $\square$ $-$
c) Kerry tallies the number of each colored $\qquad$ used during the school's field day.


| Kerry's Tally |  |
| :--- | :---: |
| Color | Number |
| Blue |  |
| Green |  |
| Black |  |
| Red |  |
| Silver |  |

$\square$

If each of Kerry's tallies represents $\qquad$ items, how many items are represented by the color $\qquad$ ?

## Writing Numbers, Pattern Table, Pattern Chart

a) What is the correct way to write the number $\qquad$ in words?
b) A pattern that increases when the same amount is added to each term is represented as follows:

| Pattern Table |  |
| :---: | :---: |
| Term Number | Term Value |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

Which is the term number when the term value is $\qquad$ $?$
c) Circle the number that is ___ more. Continue the pattern of adding ___ more.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Graphing and Equations

a) Graph each on the accompanying number line.

b) Round each of the following numbers to the nearest hundred.

c) How might the following be written as an equation?


## Equations, Ordering and Averages

a) Solve the following equations if $x=$
i)
ii)
b) Order is very important in completing algebra problems. For instance:

- Always do what's in the brackets first
- Multiplying and dividing come before adding and subtracting

Solve the following equations.


## ii)

c) Examine the input-output table shown below.

| Input | Output |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |

Which rule describes the data?
d) Calculate the average from these five numbers.


Average: $\qquad$

## Plotting and Coordinates - ○○○○ ○○○○○○ ••••

a) Plot the following coordinates on the accompanying grid:
$A=$

B =
$C=$
$\mathrm{D}=$


b) Plot the coordinates for the four objects indicated.

1 =
$2=$

3 =

4 =

## Tessellations

A tessellation is also known as tiling. A tessellation is made by a shape being repeated over and over again. The shapes fit together without any overlapping or gaps. A tessellation can also be made by repeating a design made by interlocking regular polygons. (Remember, a regular polygon has sides of the same length.)

Create a tessellation using pattern blocks. Trace around each block used to make the tessellation.

$\square$

## Coordinate System



Plot the following coordinates. Connect each dot in order.

| $\mathbf{A}$ | $-2,2$ |
| :---: | :---: |
| $\mathbf{B}$ | 0,9 |
| $\mathbf{C}$ | 2,2 |
| $\mathbf{D}$ | 9,2 |
| $\mathbf{E}$ | $4,-2$ |$\quad$| $\mathbf{F}$ | $6,-9$ |
| :---: | :---: |
| $\mathbf{H}$ | $-6,-9$ |
| $\mathbf{I}$ | $-4,-2$ |
| $\mathbf{J}$ | $-9,2$ |

## Polyhedrons and Platonic Solids <br> - •••• •••••• ••••

Poly means "many" and hedron means "face". A polyhedron is a solid with only flat faces.

Circle the solid shapes that are polyhedrons.



There are five platonic solids. To figure out if a shape is a platonic solid, add the number of faces(F) and vertices (V), and subtract the number of edges ( $\mathbf{E}$ ). If the answer is two, the figure is a platonic solid.
$\mathbf{F}+\mathbf{V}-\mathbf{E}=\mathbf{2}$

| Shape | Faces <br> (F) | Vertices <br> (V) | Edges <br> (E) | F+V+E = | Is it a <br> Platonic <br> Solid? |
| :--- | :---: | :---: | :---: | :--- | :--- |
| Dodecahedron |  |  |  |  |  |
| Octahedron |  |  |  |  |  |
| Cube |  |  |  |  |  |
| Tetrahedron <br> (Triangular Pyramid) |  |  |  |  |  |
| Icosahedron |  |  |  |  |  |

## It's all About the Label

The following shows the nutritional facts from a food label for a box of cereal before it is mixed with milk. Look at the label closely, then answer the questions below. Share your results in class.
Serving Size ..... 1 cup (236 mil.)
Calories: ..... 180
Calories from fat: ..... 10
Total fat ..... 1 gram
Cholesterol: ..... 0 mg
Sodium: ..... 5 mg
Potassium: 170 mg


1. If a person ate two bowls of this cereal, how many total grams of fat would he or she take in from the cereal?
$\square$
2. If a person eats a bowl of this cereal for a week, how many milligrams of sodium would he or she take in for seven days?
3. If a person ate half a bowl of this cereal, how much potassium would he or she take in from the cereal?
$\square$
4. If a person hopes to take in ten grams of fat, how much cereal would he or she have to eat?
5. Suppose a person eats three servings of the cereal. Rewrite how the label would look to show the nutritional facts for three servings.

## Measurement All Around

Think about the classroom you are currently in. Suppose you were going to replace the floor. To do this, you would need to know the area of your classroom floor. On your own, or with the help of other classmates, complete the following task.

1. Determine what unit would be best to measure the area. Share your suggestions in class.
2. Determine which tool you will use to find this measurement. Share your suggestions in class.
3. Make an estimate for the classroom area. Share your estimate in class. Explain how you determined the estimate.
4. Create a plan to find the area. What will you need to measure? How will you use these measurements to find the area? Share your ideas in class.
5. Find the area. Share your area in class.
6. Make a drawing or diagram of your classroom. In this diagram, show the area of your classroom. Label the length and width of each side of the classroom.
7. Compare the area of the classroom with the perimeter of the classroom. How are they similar? How are they different?
8. Up for a challenge? A typical tile used to put on a classroom floor is 9 inches by 9 inches (or 22.5 cm by 22.5 cm). How many tiles would you need to use to cover your entire floor?

## Poster Power

You have been asked to design a poster for an upcoming movie. Your job is to make a poster that can be large enough to be displayed outside a theater. To do this you will need to:

1. Determine what movie you want to advertise.
2. Design the poster. Working alone or with a small group, make a draft of the poster.
3. Measure the length and width of the poster in inches.
4. Measure the perimeter of the poster. Explain how many inches of wood will be needed to make a frame for this poster. Convert this measurement into feet.
5. Measure the area of the poster.

When you are done, share your findings in class. Then, arrange the designs in order from largest to smallest.

## The Probability of Change <br> - •••• ••••• • •• •



The picture shows the change that Frieda has in her wallet. What is the probability that she will pick a penny out of her wallet?
a) A penny
b) A nickel
d) A dime $\square$
e) Create a tally sheet to organize the money above.
f) Create a graph using the tally sheet above.

## The Probability of Sales

At Ramon's school, they had a bake sale as a fundraiser for families at Christmas. Each year, Ramon's school tries to raise more money than the previous year.

The line graph below shows how much money the bake sales have sold over the past few years. Use the graph to answer the following questions:

Christmas Fundraiser Bake Sale

a) How much money was made in Year 4?
b) In which year did they make the least amount of money?
c) In which year did they make the most amount of money?
d) How much more money did they make in Year 5 than in Year 2?
e) What was the most money made in one year?
f) What were the combined sales of the last two years?

## Calculating Popsicle Sales <br> - ○○○○ ••••○○ ••••

The School Parent Council is having a Popsicle sale to raise money for the school library.
Look at the section of the circle graph carefully. The smallest section will be the least number of popsicles sold. Using the information below, finish the circle graph by writing the grade and amount of popsicles sold into their corresponding section.

Grade 1: 48 Popsicles sold
Grade 4: 15 Popsicles sold

Grade 2: 18 Popsicles sold
Grade 5: 30 Popsicles sold

Grade 3: 25 Popsicles sold Grade 6: 19 Popsicles sold

b) Which grade bought the fewest popsicles?
c) How many more popsicles did the Grade 1s buy than the Grade 5s?

d) How many popsicles were sold in all? $\square$

