INTERNATIONAL INDIAN SCHOOL, DAMMAM
UPPER PRIMARY SECTIONS
CLASS IV MathMAThMAThS WORKSHEET (FOR SA -2 MARCH 2016)

Name: ____________________________  Section: IV – ______

FRACTIONS

1. Fill in the blanks:
   1. ____________________________ is a part of a whole.
   2. ____________________________ of the fraction that tells how many fractional parts are in a whole.
   3. ____________________________ fractions have the same value.
   4. The ____________________________ shows the number of equal parts the whole has been divided into.
   5. ____________________________ fractions have same denominators.
   6. A fraction whose value is less than one whole is called a ____________________________ fraction.
   7. A numeral which is a combination of a whole number and a fractional number is called ____________________________.
   8. If the denominators are equal, the fraction with the greatest ____________________________ is the greatest fraction.
   9. For fraction with equal numerator, the smaller the ____________________________ the greater the value.
   10. The fractions can be added in ____________________________.
   11. A fraction doesn’t change, if ____________________________ is subtracted from the fraction.
   12. \( \frac{5}{12} - 0 = \) ____________________________
   13. \( \frac{16}{32} - \frac{16}{32} = \) ____________________________
   14. \( \frac{10}{56} + 0 = \) ____________________________
   15. \( \frac{16}{20} + \frac{10}{20} = \) ____________________________
   16. \( \frac{15}{10} \) is an example of ____________________________ fraction.
   17. \( \frac{1}{20}, \frac{1}{15} \) are examples of ____________________________ fractions.

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18. $\frac{3}{5} = \frac{18}{15}$
19. $\frac{2}{6} = \frac{10}{30}$
20. $\frac{9}{4} = \frac{9}{12}$
21. $\frac{6}{40} = \frac{3}{20}$

22. To get an equivalent fraction, we multiply the numerator and the denominator by ____________________.

23. Numerator of the first $x$ Denominator of the second = Numerator of the second $x$
   ____________________

24. $\frac{3}{4} + \frac{6}{12} + \frac{8}{17} = \frac{6 + 3}{12} + \frac{3}{4}$

25. $\frac{5}{11} + 0 = \frac{13}{5}$
26. _____ $- 0 = \frac{13}{5}$

27. $\frac{9}{18} - ____ = \frac{9}{18}$
28. _____ $- \frac{6}{9} = 0$

29. $\frac{1}{4}$ of a rupee = ______p.
30. $\frac{3}{5}$ of a kg = ______g

II. Choose the correct answer from the brackets:

1. Fractions whose value is greater than one whole are called ______________ fractions.
   (improper, mixed, proper)

2. A fraction in which numerator '1' is called a ____________________.
   (mixed fraction, unit fraction, improper fraction)

3. ________________ fractions have different denominators. (equivalent, like, unlike)

4. The addition of ________________ and a fraction gives the fraction itself. (1, 0, 2)

5. A fraction when subtracted from itself gives ________________.
   (1, 0, fraction itself)

6. $3\frac{2}{16}$ is a ____________________ fraction. (proper, improper, mixed)

7. Unit fractions (except $\frac{1}{1}$) are also ________________.
   (proper fraction, improper fraction, mixed fraction)

8. $\frac{1}{5}, \frac{2}{10}, \frac{3}{15}$ are ____________________ fractions. (equivalent, like, unlike)
9. \( \frac{18}{15} \) is \hspace{1cm} \text{fraction. (mixed, unit, improper)}

10. \( \frac{3}{4} + \frac{3}{4} + 0 = \) \hspace{1cm} (0, \frac{6}{8}, \frac{6}{4})

11. \( 0 + \frac{1}{2} = \) \hspace{1cm} (0, \frac{1}{2}, \frac{2}{2})

12. \( 2\frac{3}{5} - 2\frac{3}{5} = \) \hspace{1cm} (0, \frac{23}{5}, \frac{3}{5})

13. \( \frac{3}{10} \) of Rs60 = \hspace{1cm} (18, 20, 25)

14. How much is 5 times \( \frac{1}{10} \) \hspace{1cm} (\frac{2}{5}, \frac{5}{10}, \frac{6}{10})

15. \( \frac{8}{20} \) of a kg = \hspace{1cm} g (400, 500, 800)

III. Write True or False:

1. All unit fractions are improper fractions also. \hspace{1cm} 

2. Proper fractions can be written as mixed fractions. \hspace{1cm} 

3. \( \frac{3}{6} \) and \( \frac{6}{12} \) are equivalent fractions. \hspace{1cm} 

4. \( \frac{16}{25} \) and \( 0 = 0. \) \hspace{1cm} 

5. \( \frac{18}{38} \) \hspace{1cm} \( \frac{21}{38} \). \hspace{1cm} 

6. \( \frac{25}{36} \) and \( \frac{12}{36} \) are like fractions. \hspace{1cm} 

IV. Write in ascending order:-

1. \( \frac{11}{12}, \frac{45}{12}, \frac{54}{12}, \frac{2}{12} \)

V. Write in descending order:-

1. \( \frac{2}{14}, \frac{3}{14}, \frac{5}{14}, \frac{4}{12} \)
VI. Reduce to the lowest forms:

1. \( \frac{45}{60} \)
   \( \frac{75}{90} \)

VII. Change the fraction into equivalent fraction with denominator 24

(a) \( \frac{5}{4} \)
(b) \( \frac{4}{3} \)

VIII. Change the fraction into equivalent fraction with numerator 18

(a) \( \frac{3}{5} \)
(b) \( \frac{2}{7} \)

Do in Revision Notebook

IX. Write four equivalent fractions of the following fractions.

(a) \( \frac{1}{3} \)
(b) \( \frac{9}{10} \)

X. Find the sum

(a) \( \frac{3}{4} + \frac{2}{8} \)
(b) \( \frac{6}{25} + \frac{7}{25} \)
(c) \( 2 \frac{1}{6} + 3 \frac{5}{6} \)
(d) \( 3 \frac{1}{5} + 2 \)

XI. Subtract the following:

(a) \( \frac{32}{56} - \frac{27}{56} \)
(b) \( 4 \frac{2}{11} - 2 \frac{3}{11} \)
(c) Subtract \( \frac{13}{27} \) from \( \frac{21}{27} \)
(d) Subtract \( 2 \frac{18}{37} \) from \( 3 \frac{36}{37} \)

XII. a) Multiply \( \frac{4}{6} \) by \( \frac{7}{8} \)
(b) Multiply \( \frac{8}{15} \) by \( \frac{7}{10} \)
XIII. Find the product:

(a) \(17 \times \frac{11}{12}\)  
(b) \(18 \times 2 \frac{1}{2}\)  
(c) \(2 \frac{2}{2} \times \frac{5}{7}\)  
(d) \(6 \frac{1}{7} \times 9 \frac{1}{10}\)

XIV. Find (a) \(\frac{2}{20}\) of 100  
(b) \(\frac{5}{12}\) of 60

LESSON – BASIC GEOMETRICAL CONCEPTS

1. Fill in the blanks:

1. A ________________ is a part of a line which extends infinitely on one direction.
2. A ________________ has two end points.
3. A ________________ may be extended in both directions infinitely.
4. A ________________ has no length, breadth or height.
5. Simple closed curves formed by 3 or more line segments are called as ________________.
6. A ________________ is the smallest shape and ________________ is the simplest form of shape.
7. A line segment is a part of a ________________.
8. ________________ rays can be drawn taking point P as end point.
9. A ________________ has a definite length.
10. When two rays meet at one common end point, an ________________ is formed.
11. Each ray of an angle is called as an ________________ of the angle.
12. The common end point of the angle is called the ________________ of the angle.
13. The standard unit of angles is ________________.
14. We use ________________ to construct or measure an angle.
15. A ________________ angle measures 90°.
16. Angles which measure less than 90° are called ________________ angles.
17. An ________________ angle measures between 90° and 180°.
18. An angle whose measure is ________________ is called a straight angle.
19. Acute angles measure between______________ and ________________.
20. The symbol ________________ is used to denote an angle.
21. A ________________ angle is equal to two right angles.
22. The letter denoting the ________________ of angle is always written in the middle.
23. A __________________ is a simple closed curve.
24. We can draw circles using a ____________________
25. The length of the boundary of the circle is its ____________________________
26. The ________________ of a circle is the line segment joining the centre of the circle to any point on the circle.
27. The __________________________ passes through the centre of the circle.
28. ___________________________ of a circle is the longest Chord of a circle.
29. Diameter of a circle is ____________ its radius.
30. Any portion on the circumference of a circle is called an ____________
31. If the diameter of a circle is 8 cm, its radius is ________________
32. The diameter divides the circle into two ________________
33. If the radius of a circle is 10 cm, its diameter is ________________
34. Radius of a circle = __________________ x diameter of the circle.
35. All the __________________________ of a circle are equal.

II. Write true or false :-
1. We can measure a line.
2. A ray has two end points.
3. A line extends endlessly on both the directions.
4. A line is a part of a line segment.
5. The point where 2 rays meet is called the vertex of the angle.
6. A divider is used to measure an angle.
7. An angle has only one vertex.
8. An angle which measures 180° is called a straight angle.
9. Radius of a circle is quarter the diameter.
10. An angle of 50° is called an obtuse angle.
11. An angle of 145° is called an acute angle.
12. A compass is used to draw a circle.
13. All the radii of a circle are unequal.
14. The letter E is symmetrical.
15. A point is the simplest form of shape.
16. We cannot determine the length of a ray.
17. Radius of a circle is the longest chord of a circle.
18. If the diameter of a circle is 6 cm, its radius is 3 cm.
19. If the radius of a circle is 5 cm, its diameter is 12 cm.
20. Circle is a simple closed curve.

III. Do as directed:-
1. Measure the following line segments.

2. Draw line segments of the following lengths and name them.
   a) 9 cm  b) 4 cm  c) 6 cm  d) 5 cm
3. Draw an angle XYZ and name its vertex and arms:
4. Draw angles of given measures and name them:
   a) 90°  b) 110°  c) 35°  d) 180°  e) 60°
5. Identify the following angles as acute, right, obtuse or straight from the given measures:
   a) 50°  b) 170°  c) 20°  d) 90°  e) 180°  f) 65°  g) 120°  h) 105°  i) 89°  j) 45°
6. Identify the following figures and write the symbol for them:
   a) ___________  
   b) ___________  
   c) ___________

7. Using a compass draw circles with the following radii:
   a) 5 cm  b) 4 cm  c) 6 cm
8. Find the radius of the circle whose diameter is:
   a) 10 cm  b) 8 cm  c) 5 cm  d) 12 cm
9. Find the diameter of the circle whose radius is:
   a) 11 cm  b) 6 cm  c) 15 cm  d) 9 cm
10. Complete the chart:

<table>
<thead>
<tr>
<th>RADIUS</th>
<th>DIAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 cm</td>
<td>12 cm</td>
</tr>
<tr>
<td>8 cm</td>
<td>4 cm</td>
</tr>
</tbody>
</table>
11. Find the measurement of the following angles using a protractor:

12. Name each of the following angles in two ways:

13. Measure the diameter and radius of the circles:
I. Fill in the blanks:

1. The length around a figure or shape is called the __________________ of the figure.
2. The measure of the enclosed surface is called ____________________________.
3. Perimeter of a rectangle = 2 x (length ____________________________).
4. Perimeter of an equilateral triangle is ____________________________.
5. The area of a square whose sides are side is 10 cm is __________________.
6. The length and breadth of a rectangle is 30 cm and 20 cm respectively, its perimeter is ________.
7. The area of a rectangle whose length is 2 cm and breadth is 1 cm is ________________
8. One side of a square is 1m, its perimeter ____________________________.
9. The perimeter of an equilateral triangle whose side is 4 cm each is ____________________________.
10. The area of a square having side 1mm is __________________.
11. ____________________________ is a special kind of perimeter which is the distance around a circle.
12. All figures bounded by straight line segments are called ____________________________.
13. The area of a ____________________________ is equal to the product of its length and breadth.
14. The length of a iron wire required to fence a square garden with side 8m is ________________

II. Find the perimeter of the following shapes from the measurements given:

a)  
\[
\begin{array}{c}
2 \text{ cm} \\
10 \text{ cm} \\
7 \text{ cm} \\
12 \text{ cm} \\
9 \text{ cm}
\end{array}
\]

b)  
\[
\begin{array}{c}
6 \text{ cm} \\
3 \text{ cm} \\
5 \text{ cm}
\end{array}
\]

c)  
\[
10 \text{ cm}
\]

d)  
\[
15 \text{ m}
\]

e)  
\[
\begin{array}{c}
3 \text{ cm} \\
3 \text{ cm} \\
4 \text{ cm} \\
4 \text{ cm} \\
2 \text{ cm}
\end{array}
\]
III. Find the following:  (Do in Revision Notebook)

1. Mr. Roy bought a carpet measuring 15 m long and 12 m broad. What is its total length?
2. The following figure shows the shape of the park in the front of Ram’s house.

![Diagram of a park with dimensions 100 m x 55 m and 30 m x 70 m]

He runs around the park twice daily. How much distance does he cover in one day?

3. By counting the unit squares, find the area of:

   a) ![Square grid with 16 squares]
   b) ![Square grid with 25 squares]

4. Find the area of the square plot having side 22 m long.
5. A boundary wall is built around a rectangular land of length 35 m and width 32 m. Find the total cost of making the path, if it costs Rs. 8 per meter.
6. A square park is 45 m long. Find its area.
7. A farm is 23 m long and 17 m wide. Find its perimeter.
8. The three sides of a triangle are 17 cm, 15 cm and 21 cm. Find its perimeter.
9. A bed sheet is 20 m in length and 10 m in breadth. Find its area and perimeter.

IV. To be solved in graph book:

1) What is the cost of tiling a rectangular plot of land 55 m long and 42 m wide at the Rate of Rs. 5 per sq.m?
2) Find the area of a square plot of side 205 cm
3) What is the measure of the enclosed surface of a piece of land 183 cm long and 36 cm wide?

DATA HANDLING

I. 1) Representing numerical data by using picture symbols is called

a) graph  b) diagram  c) pictograph
2) Representing numerical data by cutting a circle into wedges to show differences is called
   a) pie graph  b) bar graph  c) pictograph

3) Facts collected for reference or analysis is called
   a) news  b) theme  c) data

II. Study the data given in the following pictograph and answer the questions:-
   The pictograph shows the visitors visiting the hill stations on a particular day.

<table>
<thead>
<tr>
<th>Hill Stations</th>
<th>Each 🐰 represents 100 visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shimla</td>
<td>🐰 🐰 🐰 🐰 🐰 🐰</td>
</tr>
<tr>
<td>Darjeeling</td>
<td>🐰 🐰 🐰</td>
</tr>
<tr>
<td>Ooty</td>
<td>🐰 🐰 🐰 🐰 🐰 🐰</td>
</tr>
</tbody>
</table>

1) How many people visited Darjeeling?
   a) 3  b) 30  c) 300

2) Where did maximum number of people go?
   a) Shimla  b) Darjeeling  c) Ooty

3) How many total people visited the three hill stations?
   a) 1000  b) 1400  c) 1200

4) How many more people visited Shimla than Ooty?
   a) 1  b) 1000  c) 100

III. Given below a smart chart showing favourite subject of students in a class. Look at the pictograph answer the following questions:-

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths</td>
<td>🐰 🐰 🐰 🐰 🐰</td>
</tr>
<tr>
<td>English</td>
<td>🐰 🐰 🐰 🐰 🐰</td>
</tr>
<tr>
<td>E V S</td>
<td>🐰 🐰 🐰</td>
</tr>
<tr>
<td>Hindi</td>
<td>🐰 🐰 🐰 🐰 🐰</td>
</tr>
</tbody>
</table>

1) How many students like E V S?
   a) 15  b) 3  c) 30
2) Which subject is most popular?
   a) Hindi
   b) English
   c) Maths

3) How many more students prefer Maths over E V S?
   a) 10
   b) 3
   c) 20

4) How many students like Hindi?
   a) 40
   b) 20
   c) 4

IV. Represent the following information in the form of a pictograph. (Do in Graphbook)

Favourite TV Channels in Class IV
a) Comedy - 9 Children
   b) Sports - 12 Children
   c) Cartoon - 12 Children
   d) Adventures - 6 Children

- Stands for 2 Children

V. The Pie Chart shows the number of students in a class who like different kinds of story books. Answer the questions.

a) Which is more popular – Mystery Stories or Fairy Tales?

b) Between animal Stories and Science Fiction, which is more popular?

c) Monu says, “More than half the class likes mystery stories.” Is he correct?

d) Between fairy tales and animal stories, which is more popular?

VI. List below shows the number of applications a University received for a particular course over the last five years. Draw a bar graph to represent the following information. (Do in Revision Notebook.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>2,000</td>
</tr>
<tr>
<td>2000</td>
<td>3,000</td>
</tr>
<tr>
<td>2001</td>
<td>5,000</td>
</tr>
<tr>
<td>2002</td>
<td>5,000</td>
</tr>
<tr>
<td>2003</td>
<td>6,000</td>
</tr>
</tbody>
</table>
VII. A food corner recorded the number of food items that were sold on a particular day. The bar graph shows the data. Read the bar graph and answer the following questions.

<table>
<thead>
<tr>
<th>Food items sold in a day</th>
<th>Pizza</th>
<th>Hot dog</th>
<th>Panera Wrap</th>
<th>Noodles</th>
<th>Burger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of items sold</td>
<td>70</td>
<td>40</td>
<td>80</td>
<td>60</td>
<td>70</td>
</tr>
</tbody>
</table>

a) How many plates of noodles were sold? ________________
b) Which item was sold the most? ________________
c) How many burgers were sold? ________________
d) Which item was sold the least? ________________