



Master Lesson Plan

For

Tenths and Hundredths

Board	Standard	Subject	Chapter	Language	Reference Link	Creation Date
CBSE	STD V	Mathematics	Tenths and Hundredths	English	Tenths and Hundredths	2020-08

Disclaimer

- * Strictly not for Commercial use. *Provided on 'as is' basis with no warranties of any kind.
- * Content that falls in Public Domain or common Knowledge facts can be used freely.
- *Some of the contents are owned by the Third parties and are used in compliance with their licensing conditions. Any one infringing the Copyright of such Third parties will be doing so at their own risks and costs.
- * Content can be downloaded and used for Personal, educational and informational purposes only. Any attempt to remove, alter, circumvent or distort the data that is accessed is Illegal and strictly prohibited.

Tenths and Hundredths

1. MS_Objectives - Tenths and hundredths

Students will be able

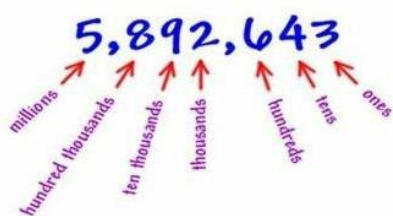
- 1) To explain tenths and hundredths of a decimal number and convert the given values using tenths and hundredths.
- 2) To differentiate between $\frac{1}{10}$ and $\frac{1}{100}$ of a number.
- 3) To appreciate interesting facts about decimals.
- 4) To recognise the concept of decimals in money.
- 5) To identify the usage of decimals in day to day life.
- 6) To distinguish between millimeter and centimeter.
- 7) To determine the appropriate unit for measuring the objects.
- 8) To appreciate the importance of being a role model in life.

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Main Script	Decimals	

2. MS_Introduction to tenths and hundredths

INTRODUCTION TO TENTHS AND HUNDREDTHS USING PLACE VALUE CHART

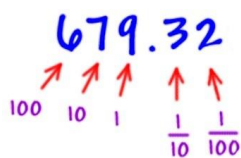
Let's take a minute to remember regular place values and place names for whole number:



Can you name the place value on the right of the decimal point in the number given below?



Let's look at the place values in numbers... This is how these guys got their names:



What are tenths???

Tenths have one digit after the decimal point.

The decimal 0.8 is pronounced "eight tenths" or "zero point eight".

It is equal to the fraction $\frac{8}{10}$.

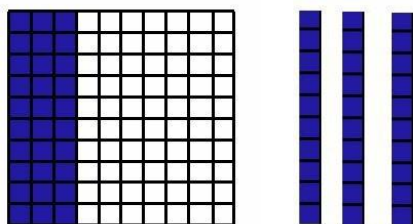
What are hundredths???

Hundredths have two digits after the decimal point.

The decimal 0.36 is pronounced "thirty-six hundredths" or "zero point three six".

It is equal to the fraction $\frac{36}{100}$.

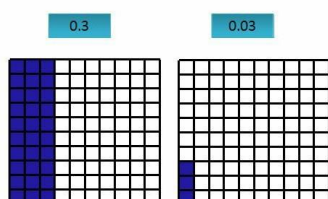
How to graph 0.3 (three - tenths)?



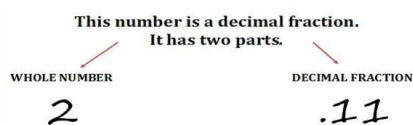
How to graph 0.03 or three hundredths?

□

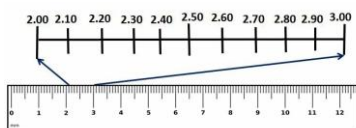
Which is greater? 0.3 OR 0.03



What does a decimal number comprise of??

Example:**2.11**

Describing tenths and hundredths by measuring the lengths of object



Look at the following :



$$6.7\text{cm} = (6.0\text{cm} + 0.7\text{cm}) = 6 + \frac{7}{10}$$



$$9.8\text{cm} = (9.0\text{cm} + 0.8\text{cm}) = 9 + \frac{8}{10}$$



$$4.5\text{cm} = (4.0\text{cm} + 0.5\text{cm}) = 4 + \frac{5}{10}$$



$$9.8\text{cm} = (9.0\text{cm} + 0.8\text{cm}) = 9 + \frac{8}{10}$$

Describing tenths and hundredths by conversion of rupees to paise and vice versa

Example 1 :

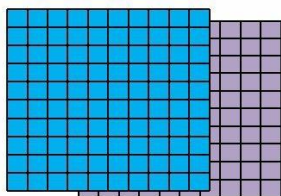
Rs.4.76/-

4.76

Whole Number of Rupees
₹ 4Decimal part is
76 paise

If each block is one PAISA how much is the complete square with 100 blocks worth ?

It is 1 rupee



$$1p = \frac{1}{100} = 0.01$$

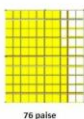
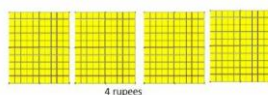
$$1p = \frac{1}{100} = 0.01$$

$$2p = \frac{2}{100} = ₹ 0.02$$

$$3p = \frac{3}{100} = ₹ 0.03$$

$$4p = \frac{4}{100} = ₹ 0.04$$

$$5p = \frac{5}{100} = ₹ 0.05$$



1 Rupee = 100 Paise

We write 'Re' for rupee, 'Rs' for Rupees and 'P' for paise.

When the amount has rupees and paise both, we separate them by putting a dot in between them.

For example : Rupees three and five paise are written as Rs. 3.05

Amount	Amount in words	Amount in figures
20 rupees 7 paise	Rupees twenty and paise seven	Rs 20.07
70 rupees	Rupees seventy	Rs 70.00

Example 2

See the different amounts on the bill:

Small Superbiotic Pizza Original Crust	650.00
Small Greenhouse Pizza Original Crust	650.00
500ml Coke	100.00
16% VAT Subtotal	1,400.00
16% VAT Tax	193.10
2% T&SL Subtotal	1,400.00
2% T&SL Tax	27.45
Total	1,400.00
Cash	2,000.00
Change	600.00
Balance Due	0.00

1 RUPEE = 100 PAISE

If you multiply rupees by 100 you get paise

Example1: Convert 3 rupees into paise

$$\text{Rs } 3 = 3 \times 100 \text{ paise}$$

$$= 300 \text{ paise}$$

Example2: Convert Rs. 5.35 into paise

$$\text{Rs } 5.35 = \text{Rs. } 5 + 35 \text{ paise}$$

$$= 5 \times 100 \text{ paise} + 35 \text{ paise}$$

$$= 500 \text{ paise} + 35 \text{ paise} = 535 \text{ paise}$$

$$100 \text{ Paise} = 1 \text{ rupee}$$

If you divide paise by 100, you get rupees

Example 3 : Convert 626 paise into rupees and paise

$$626 \text{ paise} = 600 \text{ paise} + 26 \text{ paise}$$

$$= \text{Rs}(600 \div 100) + 26 \text{ paise}$$

$$= \text{Rs } 6 + 26 \text{ paise}$$

$$= \text{Rs. } 6.26$$

Example 4 : Convert 400 paise into rupees

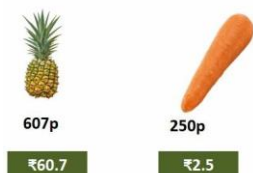
$$400 \text{ paise} = \text{Rs}(400 \div 100)$$

$$= \text{Rs. } 4.00$$

Example 5 : These are the cost of some eatables. Their prices have been given in Rupees. Convert them in Paise.



Example 6: These are cost of some eatables given in paise .Convert them into rupees.



Describing tenths and hundredths by explaining through weather reports of various places

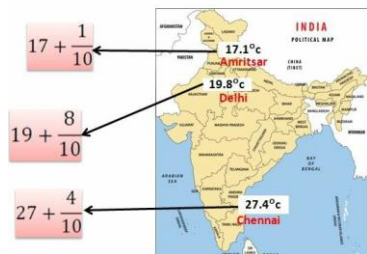


Image sources

Scale: <https://pixabay.com/de/vectors/herrscher-metrisch-ma%C3%9Fnahme-l%C3%A4nge-4113045/>

Pencil : <https://pixabay.com/de/vectors/bleistift-logo-grafik-zeichnen-3374506/>

Knife: <https://pixabay.com/de/photos/ausbeinmesser-sabatier-k%C3%BCche-4101445/>

battery : <https://pixabay.com/de/photos/batterie-duracell-macht-energie-1001878/>

ballon: Created by ITV Valli

bill : Valli.m@srisathyaividyaivahini.org

watermelon : <https://pixabay.com/de/illustrations/wassermelone-scheiben-wassermelone-178>

pumpkin <https://www.publicdomainpictures.net/en/view-image.php?image=25876&picture=pumpkin-isolated>

apple : <https://pixabay.com/de/photos/apfel-obst-rot-frisch-vitamine-4258412/>

orange: <https://pixabay.com/de/photos/orange-isoliert-wei%C3%9Fen-hintergrund-1282913/>

pineapple : <https://pixabay.com/de/photos/ananas-obst-wei%C3%9Fer-hintergrund-1581281/>

carrot : <https://publicdomainvectors.org/en/free-clipart/Carrot-symbol/58081.html>

india map: www.srisathyaividyaivahini.org

other tables : Created by author

Time to teach	Asset Type	Theme	SubTheme
15 Minutes	Main Script	Numbers	

3. IQ_Introduction to tenths and hundredths

Q-1 Which chocolate bar is more expensive (a) or (b) and by how much?



(a)



(b)

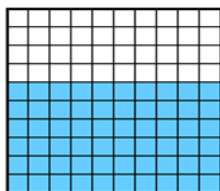
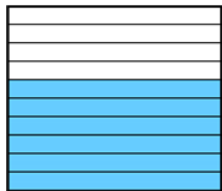
Ans. In chocolate bar (a) Rs.80.1, 0.1 is the $\frac{1}{10}$ of a rupee, which means one part out of 10.

In chocolate bar (b) Rs.80.01, 0.01 is the $\frac{1}{100}$ of a rupee which means it is one part out of 100 which is smaller than one part out 10.

Hence, $0.1(\frac{1}{10}) > 0.01(\frac{1}{100})$

Bar (a) is more expensive by Rs. 0.9

Q-2 Write the shaded part of the following figure. Are they the same in both figures?



Ans. The shaded area is six tenths of whole which means 6 parts out of 10 are shaded.i.e $6/10$

The shaded area is sixty hundredths of whole which means 60 parts out of 100 are shaded i.e $60/100 = 6/10$

Yes they are the same .

Q-3 Which unit is used for measuring these objects?

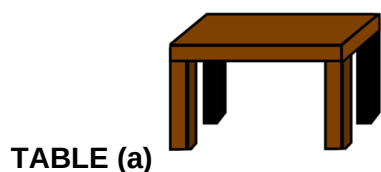


TABLE (a)



CHILD'S HEIGHT (b)



DICE (c)

Ans .

- a) The length of the table is measured in meters.
- b) The height of the child is measured in centimeters.
- c) The length of dice is measured in millimeters.

Meter is the most commonly used unit to measure length. Centimeter is used for smaller objects and millimeter for very small objects.

1 m = 100 cm i.e 1 cm = $1/100$ of meter

1 cm = 10 mm i.e 1 mm = $1/10$ of cm

Q-4.Compare these numbers with 3.

a) 3.1

b) 3.01

c) 3.001

a) 3.1 is 0.1 greater than 3 and $0.1 = \frac{1}{10}$

b) 3.01 is 0.01 greater than 3 and $0.01 = \frac{1}{100}$

c) 3.001 is 0.001 greater than 3 and $0.001 = \frac{1}{1000}$

Q-5.Who is taller?**ON OBSERVING**

As they seem to be of the same height.

So their exact length will be measured in centimeters using the length scale bringing out the minute difference.

ON MEASURING

ROHIT**ANMOL****150 cm****150 cm 1 mm**

The difference in their height is 1 mm. Hence, Anmol is taller than Rohit.

1 mm = $\frac{1}{10}$ of cm = 0.1 cm

Hence, 1 mm = one tenths of cm.

Reference(s): (URL of internet site)(images)

<https://pixabay.com/photos/chocolate-candy-sugar-sweet-2201991/> ----- **chocolate(a)**

<https://pixabay.com/photos/chocolate-bar-gluttony-candy-1200317/> ----- **chocolate (b)**

Shaded grid ---own creation

<https://pixabay.com/vectors/table-furniture-wooden-1300555/> --- **table**

<https://pixabay.com/illustrations/children-kids-child-girl-boy-163541/> --- **child's height**

<https://pixabay.com/de/vectors/zoll-band-band-ma%C3%9Fnahme-messung-311800/> ----- **height measuring tape**

<https://www.publicdomainpictures.net/en/view-image.php?image=249970&picture=green-dice>

<https://www.needpix.com/photo/491762/ruler-geometry-mathematics-draw>

Rohit & Anmol- self created

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Inquisitive Questions	Numbers	

4. IA_Decimals in money,weight and length

Meaning of Decimal:-

The word 'Decimal' really means 'based on 10' (from Latin decimal: "a tenth part").

We sometimes say decimal when we mean anything to do with our numbering system but a 'decimal number' usually means there is a 'decimal point'.

Interesting Facts:

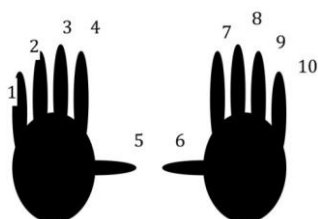
DERIVATION

Decimal is the Latin word for ten.

The methods of the decimal system were devised by the Indians. These were used as the decimal system by the Arabians and then they were imported into Europe, in the Latin and the Greek systems.

WHY DECIMAL BASED ON TEN?

It is believed that the decimal system is based on 10 because humans have 10 fingers and so were used to counting by 10s since early age.

**USE OF DECIMALS**

Metric system of weights and measures, used in most of the world, is based on the decimal system.



Currency is always written in decimals for better financial understanding.



The length of any object can also be written in decimals, when converting from one standard unit to another.



Source:

1. hands image : - <https://openclipart.org/detail/9379/countinghandsten>
2. Weighing balance image :- <https://pixabay.com/en/scales-weights-measures-gold-308063/>
3. Indian currency image :- <https://pixabay.com/en/rupees-money-indian-currency-note-435450/>
4. Inch tape image :- <https://pixabay.com/en/tape-measure-measure-yellow-1224958/>

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Interesting Asides	Numbers	

5. SA_Using decimals in money

Using decimals in money.

Aim: To make children understand the usage of decimals in various fields and daily situations of life.

Resources Required: [The teacher can mention quantities as per the class strength]

Some paper money which will be made by the children at home.

Toys to be displayed should brought by the children.

Setting for the Activity : Outdoor.

Type of Activity: Demonstration.

Instructions to Teacher:

- This activity must be informed a few days prior for students to bring in toys from home and also provide price tags attached to the toys
- Students can prepare fake money and coins in the classroom as a part of this outdoor activity
- Students to bring only good and fairly priced toys and not expensive and broken toys
- Every student must make note of the toys with price before he or she exhibits for the toy shop exhibition for sale
- The sale of toys to be marked and calculated with the help of the teacher to understand the usage of decimals in money

Procedure:

Students will set up small counters of different toys with price tags. The price has to be both in rupees as well as paise.

Some students will play the role of shopkeepers and others will enact as customers.

The children enacting as customers will go to different counters and buy the items they want with paper currency which they will make at home.

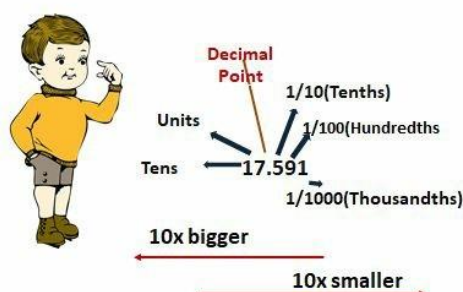
This will make children learn conversion, subtraction, addition etc. using decimals.



These pictures are just suggestive. The teacher and the students can discuss and bring their choice of toys for the activity. They can also give their own pricing while doing the activity.

Observation:

Children will be engaged in demo shopping and they will understand the usage of decimals as well as the conversion of rupees and paise.



Conclusion:

It will help children understand the concept of decimals and the usage of decimals in different fields of life.

Image source :

center picture : <https://www.needpix.com/photo/1196883/toys-shop-sale-stock-childrens-world-toy-store-lubyanka-moscow-purchase>

minion : <https://pixabay.com/de/photos/spielzeug-diener-kindheit-niedlich-1138469/>

toy next to monkey : <https://pixabay.com/de/photos/m%C3%A4nnlich-spielzeug-figurine-3743644/>

momkey: <https://publicdomainvectors.org/en/free-clipart/Stuffed-monkey/40649.html>

Robo: http://www.publicdomainfiles.com/show_file.php?id=13539934212140

Bheem: <https://pixabay.com/de/illustrations/cartoon-charakter-lustig-3854292/>

3 boys : <https://pixabay.com/de/illustrations/cartoon-kinder-kindheit-1099725/>

Last boy : <https://pixabay.com/de/vectors/junge-geste-hand-mollig-wangen-311787/>

Time to teach	Asset Type	Theme	SubTheme
15 Minutes	Suggested Activity	Numbers	

6. DD_Tenths and hundredths in daily life

Note to teacher : Teacher can choose those examples which will be suitable for her class .

Tenths and Hundredths in Daily Life

1. Cadbury chocolate



Children love to eat Cadbury chocolate. There is only one Cadbury chocolate. We need to distribute it to 10 children equally. Then each child will get $\frac{1}{10}$ or 0.10 part of the chocolate. Here, 1 piece of chocolate represents one tenth of the chocolate.

2. Thermometer



We use thermometer to measure the temperature of the body. The normal temperature of body is 98.6 °F. Here 98 represents the whole unit and 6 represents six tenths. If the temperature is more than 98.6 °F, let's say 100.2°F, then it indicates fever. Here, 100 represents the whole unit and 2 represents two tenths.

3. Time



We use clock/watch to see the time. In the above given example, the time on the mobile is 12.23 pm. Here, 12 represents the whole unit, 2 represents the two tenths and 3 represents three hundredths. In the other example, the time shown in the watch is 2.55 am. Here, 2 represents the whole unit, first 5 represents the five tenths and second 5 represents five hundredths.

4. Measurement of height / some objects



We can measure height with the help of an inch tape.

1 feet = 12 inches

1 inch = 2.5 centimeters

1 feet = 30 centimeters

1 feet = 0.3048 meter

(Reference: - <http://www.meters-to-feet.com/feet-to-meters.php>)

Ex. – Suppose, the height of a boy is

3 Feet = 36 Inches = 90 centimeters = 0.9144 meters = 0.91 meters.

Here, 9 represents nine tenths and 1 represents one hundredths.

After one year, the height of the boy becomes

3 feet 2 inches = 38 inches = 95 cm = 0.9652 m = 0.96 m.

Here, 9 represents nine tenths and 6 represents six hundredths.

5. Weight



1 Kilogram = 1000 gm

1 gram = 0.001 kilogram

There are two jars. One jar contains 250 gm (0.25 kg) of tea and the other jar contains 500 gm (0.5 kg) of Chyawanprash (Health Tonic). In the first case, 2 represents two tenths and 5 represents five hundredths. In the second case, 5 represents five tenths.

6. Nutritional Information

NUTRITIONAL INFORMATION (APPROX):		
		Per 100g
Energy	kcal	555
Protein	g	6.9
Total Carbohydrate	g	51.4
Of which Sugars	g	4.1
Total Fat	g	35.7

In the back of Lays chips packet, the nutritional information is given by the manufacturer. The nutritional information appearing in decimal numbers can be shown to the children. Here, 100 gm Lays chips packet contains 6.9 gm protein, 51.4 gm total carbohydrate of which sugar is 4.1 gm and 35.7 gm of total fat.

7. Cost



The cost of 14 colour pencils is Rs. 14.75. Here, 14 represents whole unit, 7 represents seven tenths and 5 represents five hundredths.

The cost of one story book is Rs 24.5. Here, 24 represents whole unit and 5 represents five tenths.

8. Price of Vegetables



In the market,

- the price of 1 kg of Tomato is Rs. 38.75. Here, 38 represents whole unit, 7 represents seven tenths and 5 represents five hundredths
- The price of 1 kg of Cauliflower is Rs. 60.50. Here, 60 represents whole unit and 5 represents five tenths
- the price of 1 kg of Onion is Rs. 75.25. Here, 75 represents whole unit, 2 represents two tenths and 5 represents five hundredths

9. Distance



Suppose,

- The distance from home to school is 2.75 kilometers. Here, 2 represents whole unit, 7 represents seven tenths and 5 represents five hundredths
- The distance from home to playground is 3.25 kilometers. Here, 3 represents whole unit, 2 represents two tenths and 5 represents five hundredths
- The distance from school to playground is 1.50 kilometer. Here, 1 represents whole unit and five represents five tenths

Image sources

Chocolate : <https://pixabay.com/photos/chocolate-candy-sugar-sweet-2201991/>

Thermometer : <https://pixabay.com/de/vectors/thermometer-temperatur-fieber-309120/>

phone : <https://pixabay.com/photos/iphone-smartphone-apps-apple-inc-410324/>

clock : <https://www.needpix.com/photo/1192577/clock-face-clock-time-dial-numbers-colorful-glossy-round>

tape: <https://pixabay.com/de/vectors/zoll-band-band-ma%C3%9Fnahme-messung-311800/>

boy : <https://pixabay.com/illustrations/children-kids-child-girl-boy-163541/>

Tea: Created by [ITV valli](#)

chyavanprash: <https://pixabay.com/de/vectors/sauce-tomate-salsa-lebensmittel-576891/>

colour pencil : <https://publicdomainvectors.org/en/free-clipart/Coloring-pencils-vector-clip-art/7115.html>

book : <https://pixabay.com/de/photos/buch-b%C3%BCcher-stapel-tier-tiere-210611/>

tomato : <https://pixabay.com/de/photos/qem%C3%BCse-tomaten-rot-lebensmittel-4194702/>

cauliflower : <https://pxhere.com/en/photo/1602091>

onion: <https://www.needpix.com/photo/1673010/onions-basket-vegetables-food-cooking>

house: <https://pixabay.com/de/vectors/haus-baum-idyllisch-sommer-3562064/>

school : <https://publicdomainvectors.org/en/free-clipart/School/40808.html>

park : <https://pixabay.com/de/illustrations/park-spielen-folie-kinder-4257026/>

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Day-to-day Relevance	Numbers	

7. SA_Comparison between the lengths

Aim:

- To enable the teacher to conduct an activity: Comparing different measurements of millimeter and centimeter and writing them using decimals.
- To enable the students to work in groups and learn to differentiate between millimeters and centimeters. through an activity with easily available things in the classroom and nearby vicinity and write them in decimals.

Previous Knowledge Required:

- Students should have an idea about the measuring units- centimeters and millimeters.
- The students are intimated beforehand to bring mentioned material on the activity day.
- Concept of 1 cm = 10 mm.

Resources Required:

- A pencil
- An eraser
- A chalk (available in the classroom)
- A handkerchief
- A notebook
- A rice grain
- A ruler
- The currency notes of denominations 10, 20 and 100.

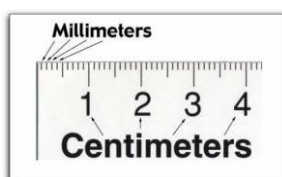
Setting for the Activity:

- It is an insightful classroom activity.

Type of Activity:

- **Group activity in classroom**

Point to be noted: We know that $1 \text{ cm} = 10 \text{ mm}$ as shown below-



Instructions to Teacher:

- It is a group activity conducted in a Classroom.
- The preparation for the activity should be done a day prior.
- The teacher can give instructions to the students about the material required in the activity.
- The teacher can show how to measure an object in each group. This may guide and increase the interest of students.
- The teacher can help the students while measuring the objects.
- The teacher will check the measurements taken by students and will decide the First, Second and Third position. The student who has the least difference compared to the measurements taken by the teacher wins the activity.
- **Note:** The measurement of objects given in the measurement table may vary.

Procedure:

1. The teacher divides the class into groups of 4 students.
2. In every group, each child will measure all the objects one by one with a ruler and record the measurements in the table provided.
3. The teacher will check the different measures taken by students and hence will decide the First, Second and Third position.
4. The student who has the least difference compared to the actual measures of the objects wins the activity.
5. Students will also be able to distinguish the measurements in millimeter and centimeter.

Students will make a “Measurement Table” in their notebook as follows-

MEASUREMENT TABLE – (GROUP NAME)

S.NO.	Object	Measurement
1	Eraser	
2	Book	
3	Handkerchief	
4	Finger Nail	
5	Table Top & Side	
6	Chalk	
7	Rice Grain	
8	Pencil	
9	₹ 10	
10	₹ 20	
11	₹ 100	

GROUP 1:

- **The teacher will give 4 objects to each group to measure, say : an eraser, a notebook, a handkerchief, a chalk, a rice grain, rupee notes etc.**
- **Each student will perform the activity by measuring all the objects one by one. He/She will write the measure of the objects in the table made in his/her notebook.**

Object 1 - Eraser

Step 1- Student will take the eraser.

Step 2- Let the student measure the 3 sides of the eraser with a ruler.

(Approximate measures are given for teacher's understanding)



1.2 cm = 1 cm and 2 mm

3.5 cm = 3 cm and 5 mm

5 mm

Step 3- Student will now write these measures in the measurement table made in the notebook.

Teacher can make the students understand that the object with a longer length will have measurement in centimeters and the smaller lengths will record measurement in millimeters.

Object 2 - Book



Arrows depicting 2 sides to be measured.

Step 1- Now students will measure length and thickness of the book with a ruler.

(Approximate measures are given for teacher's understanding)



28.3 cm = 28 cm 3 mm

7 mm

Step 2-Student will write the measure in the measurement table.

Object 3 - Handkerchief



Arrow depicting the side to be measured.

Step 1- Student will measure the length of handkerchief now.

(Approximate measures are given for teacher's understanding)



22 cm = 22 cm 0 mm

Step 2-Student will write the measure in the measurement table.

Object 4 - Finger nail



Arrows depicting 2 sides of the nail to be measured.

Steps 1-The students will now measure his/her finger nail.

(Approximate measures are given for teacher's understanding)



8 mm

4 mm

Step 2-Student will write the measure in the measurement table.

Each student in the group will measure all 4 objects and will write its measurements in his or her notebook.

Object 5 - Fingers



Arrows depicting all the fingers to be measured

Object 6 - Table top and side

Object 7 - Chalk

Object 8 - A Rice Grain**Object 9 - Pencil**

Arrows depicting 3 sides to be measured.

Object 10 - Money

10 rupees, 20 rupees and 100 rupees

The actual measures for teacher's reference are given below:

(Note: The measures may vary from object to object)

S.NO	Objects	Actual Measurement	Measurement
1.	Eraser	L=3.5CM, B =1.2, H = 5mm	
2.	Book	L = 28.3CM, Thickness =7mm	
3.	Handkerchief	Side = 22cm	
4.	Fingernail	L = 8mm, B = 4mm	
5.	Rice Grain	L = 3mm	
6.	Chalk	L = 7.1CM, B = 4mm	
7.	Rice Grain	L=3mm	
8.	Pencil	L=7.8cm, B=3mm	
9.	₹10	B=6.2cm, L = 13.7cm	
10	₹ 20	B = 6.4cm, L=14.3cm	
11	₹ 100	B= 7.5cm, L= 15.9cm	

Observation:

- Length is a measurement of an object from one end to another.
- Length is written as number + unit where,

Number tells us how many times the unit is repeated.

Unit tells us what measurement has been used to measure length.

- We begin measuring from 0 cm using a ruler.
- The standard unit of measurement is metres, denoted as m.
- Student will be able to distinguish the objects measured in millimeters and the objects measured in centimeters.

Conclusion:

- The students participate in the activity with interest and enthusiasm which enables them to differentiate between centimeters and millimeters.
- The students will be able to compare lengths of different objects in their vicinity.

Precaution:

- The students should be careful while measuring the objects.

Troubleshooting:

- Students can measure each other's hands and feet.
- Student's Interaction: A student may take name of any object and the other students will guess its length.
- One student can write the measurement while another student must convert it into decimals.
- Students can also try measuring things using an inch tape and a weighing machine with different objects to learn other methods of measurements and make note of the weight, height and length of the objects.
- Students can also measure using measuring jars for liquid objects and note the observations too.

Image sources

book:anishagogia87@gmail.com

- Handkerchief-anishagogia87@gmail.com

nail : anishagogia87@gmail.com

fingers :anishagogia87@gmail.com

pencil :<https://pixabay.com/vectors/school-pencil-pen-write-sketch-153561/>

Student's photograph : anishagogia87@gmail.com

Time to teach	Asset Type	Theme	SubTheme
15 Minutes	Suggested Activity	Numbers	

8. QA_Questions on tenths and hundredths

I . MEASUREMENT ACTIVITY

Measure the following objects that you come across everyday. (Each student will measure his/her personal things. This will help him/her to measure using decimals and also compare the size of the objects.)

1. Pencil - Length

(The student will measure his/her own pencil)



Ans 14 cm 2 mm = 14.2 cm.

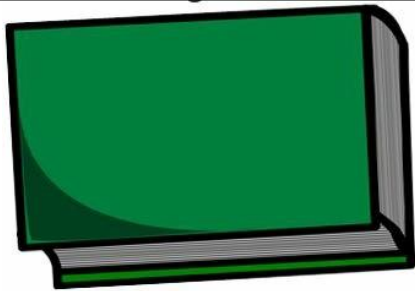
2. Eraser – Length and Breadth

Ans. Length 5 cm 2 mm Breadth 2 cm

3. Pen - Length

Ans. _____

4. Note Book - Length and Breadth



Ans. Length _____ Breadth _____

5. Mathematics Text Book – Length and Breadth



Ans. Length _____ Breadth _____

6. School Bag - Length



Ans. _____

II. COLOUR ACTIVITY – Colour the squares in the grid to represent the numbers given and then compare using $<$, $=$ or $>$ (This Activity will help the students to get clarity on numbers less than 1).

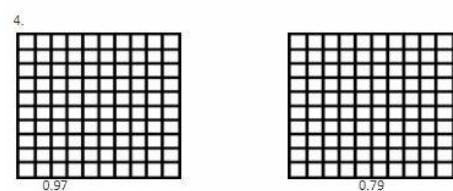
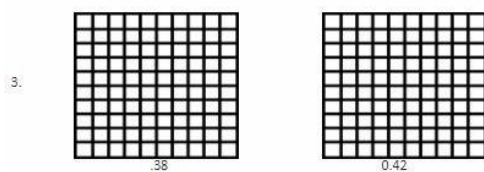
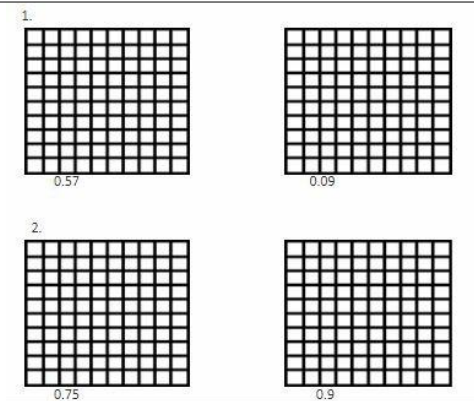


Answer:

1. $0.57 > 0.09$
2. $0.75 < 0.9$
3. $0.38 < 0.42$
4. $0.97 > 0.79$

III . COMPARE ACTIVITY- MONEY (This Activity will help in the comparison of not only the measurements but also the value. The teacher can tell a value based story to encourage donation and helping others or an interesting aside on saving money in a Bank.)

Compare the Length and Breadth of 10 , 20 and 100 rupee notes and arrange in order. Also find the sum of length and breadth



Ans

10 Rupee note – Length - 13 cm 5 mm Breadth - 6 cm 1 mm

20 Rupee note – Length - 14 cm 5 mm Breadth - 6 cm 2 mm

100 Rupee note – Length - 16 cm 6 mm Breadth - 6 cm

Ascending Order Length 13.5, 14.5, 16.6

Descending Order Breadth : 6.2, 6.1, 6

IV. Difference in height

Find the difference in the height of the two sisters in cm.



Height of elder sister : 135.5 cm

Height of younger sister : 112.7 cm

Answer : Difference in height = 22.8 cm

V. Challenge Question

Use these digits with a decimal point.

8 9 4

- (a) Write the smallest number less than one.
- (b) Write the biggest number between 8 and 9.
- (c) Write the addition of the above two numbers.
- (d) Write the difference of the above two numbers.

Answer :

a) 0.48

b) 8.94

c) 9.42

d) 8.46

Each kind of Activity may be taken up by the teacher for more time by adding similar questions depending on the time available and the class interaction. The above activities are indicators that we can assess the students learning in so many different ways.

Pencil : <https://pixabay.com/de/vectors/bleistift-logo-grafik-zeichnen-3374506/>

Eraser: http://www.publicdomainfiles.com/show_file.php?id=13967485213184

Pen: <https://publicdomainvectors.org/en/free-clipart/Pen-vector-clip-art-2/67111.html>

Notebook : <https://www.needpix.com/photo/download/175341/book-hard-cover-closed-green-blank-library-education-read-free-vector-graphics>

book : <https://pixabay.com/de/vectors/buch-studie-bildung-schule-studium-2943367/>

bag: <https://pixabay.com/de/illustrations/beutel-schule-rucksack-schulranzen-4989683/>

10Rs : <https://pixabay.com/de/photos/rupie-geldscheine-banknote-w%C3%A4hrung-2931876/>

20 Rs : <https://pixabay.com/de/photos/zwanzig-rupien-banking-w%C3%A4hrung-518048/>

100 Rs : <https://www.flickr.com/photos/geqhege/50040582322>

Sisters : <https://pixabay.com/de/illustrations/menschen-mann-frauen-oma-opa-4035403/>

Time to teach	Asset Type	Theme	SubTheme
10 Minutes	Assessments	Numbers	

9. VC_Be a Role model

Note to teacher : This asset has a video attachment.

Be a Role Model

We just learnt that 9 millimetre is same as 0.9 cm or 9/10 of a cm.

Or

1 cm is same as .01 metre or 1/100 of metre

Similarly, you may be a child to your parents, a friend, a sibling, a student, etc. But the identity that is YOU, remains the same. However, you should remember that whichever role you play, you should aim to be a role model to others.

Once a sailor took his coughing parrot to a veterinarian. The sailor suspected that he was to be blamed for the illness of the parrot because he smoked in the presence of the parrot.

The doctor examined the bird carefully. He told the sailor, “You need not worry. The bird is in good health. It's just imitating your cough.”

The sailor was shocked to hear that.

Lesson learnt?

Always be a good role model so that when others imitate you, there is something good and positive.

Time to teach	Value Type	Value Sub Type	Value Attribute
5 Minutes	Right Action		Stories

10. MS_Summary- Tenths and hundredths

Summary

Tenths and hundredths of a decimal number are explained.

1 mm = 0.1 cm = 1/10 of a cm

1 cm = 0.01 m = 1/100 of a meter

Suitable units used for measuring different objects are discussed .

Units used from small to big is mm, cm and m.

Conversion of Rupees to paise, meter to centimeter, centimetre to millimetre and vice versa are explained.

100 paise = 1 rupee

1 paise = 1/100 rupee

Uses of decimals in day to day life is discussed.

a) From the cost of one item, if you have to find cost of many items then multiply the number of items with cost of one item.

b) To find the number of items that can be purchased from a given amount, divide the total money by the cost of one item.

Measurement activities are explained and conducted.

Addition and subtraction of decimal numbers are discussed.

The effectiveness of being a role model in life is emphasised.

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Main Script	Decimals	