





Helping With Math

USAGRADES

Comparing Decimals

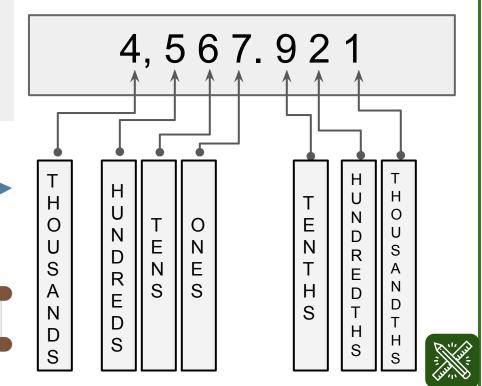
Suitable for students aged 8-10



This pack is suitable for learners aged 8-10 years old or 4th to 5th graders (USA). The content covers fact files and relevant basic and advanced activities involving comparing decimals.

Key Concepts:

- Comparing numbers in mathematics is a way of determining if one number is equal, smaller or bigger than the other number.
- Understanding which is smaller, larger, or just the same plays an important role in real-life.



January 24th is International Day of Education.

COMPARING NUMBERS

SYMBOLS USED IN COMPARING NUMBERS

SYMBOL	MEANING	EXAMPLE
=	Equal sign is used to show that the two numbers are equal in value.	2.35 = 2.35
<	Less than sign is used to show that one number has smaller value than the other number.	1.72 < 3.5
>	Greater than sign is used to show that one number has larger value than the other number.	25.67 > 19.28

Study again the symbols we are using to compare numbers. Are they already familiar to you? Do you have any question so far? Share your thoughts below.



ILLUSTRATIVE EXAMPLES







A PLACE VALUE CHART IS VERY USEFUL TO COMPARE DECIMALS. LOOK AT THE EXAMPLE BELOW:

Which is greater 5.370 or 5.349?

O N E S	A N D	T E N T H S	HUNDREDTHØ	T H O U S A N D T H S
5	•	3	7	0
5		3	4	9

Explanation:

The ones and tenths digit are the same but the hundredths digit of 5. 370 is greater than the same place value of 5. 349. Therefore, 5. 370 > 5. 349.



ILLUSTRATIVE EXAMPLES

Which one is smaller 0.195 or 0.591?

O N E S	A N D	T E N T H S	HUNDREDTHS	THOUSANDTHS
0		1	9	5
0		5	9	1

Explanation:

The tenths digit of 0.195 is smaller than the same place value of 0. 591. Therefore, 0.195 < 0. 591.



Equivalent Decimals - these are decimals having the same value. When you add zero the the right of the last digit of the decimal, its value will stay the same.



TABLE OF ACTIVITIES

	Ages 8-9 (Basic)	4th Grade
1	Education for All	
2	Let's Educate Others	
3	The Greatest Educator	
4	The Smallest School in Town	
5	The Decimal Project	
	Ages 9-10 (Advanced)	5th Grade
6	The Learning Kids	
7	Science Experiment	
8	My Math Homework	
9	Book Worms	
10	Junior Mathematician	



EDUCATION FOR ALL



International Day of Education is celebrated to promote the Education For All (EFA) policy. Make sure that everyone gets the education that they deserved by encircling the decimal number with the lowest value.

1.			
A) 3. 04	B) 2. 40	C) 3. 40	D) 2. 04
2.	M-	-V-	
A) 0. 10	B) 0. 05	C) 0. 01	D) 0. 50
3.			
A) 5. 19	B) 5. 91	C) 6. 19	D) 6. 91
4.			
A) 9. 51	B) 8. 53	C) 8. 55	D) 9. 05
5.	7		777
A) 11. 11	B) 11. 12	C) 12. 11	D)11. 21
6.			
A) 6. 23	B) 6. 32	C) 2. 36	D) 3. 26
7.			
A) 3. 2	B) 3. 20	C) 3. 02	D) 2. 30
8.			
A) 7. 04	B) 2. 40	C) 3. 40	D) 2. 04



LET'S EDUCATE OTHERS



Let's educate others about decimals by crossing out the decimal number with the largest value.

Which has the largest value?

1. 25. 8

24. 8

26.8

2.

21.1

11. 2

12.1

3.

0.67

0.76

0.75

4.

1.23

2.21

1.32

5.

5.9

5.09

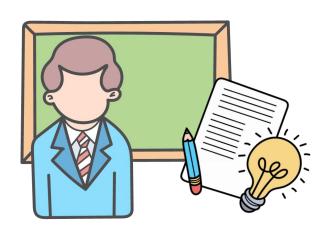
5.02



THE GREATEST EDUCATOR



A great person once said that the greatest weapon to fight poverty is education. Let's do that by learning decimals. Use < or > to complete the mathematical sentences.



5) 11.2 _____ 12.1

6) 3.27 _____ 3.17

1) 4.2 _____ 4.02

7) 8.03 _____ 8.30

2) 1.9 _____ 9.1

8) 5.6 _____ 6.5

3) 0.23 _____ 0.32

9) 0.2 _____ 1.02

4) 0.18 _____ 0.8

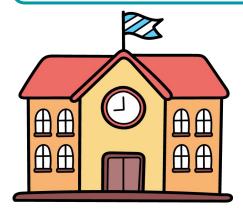
10) 3.3 _____ 4.4



THE SMALLEST SCHOOL IN TOWN



Look for the smallest school in town by selecting the decimal with a smaller value. Encircle the number to identify your answer.



9) 1.12 vs 1.21

8) 24.03 vs 24.30

7) 21.6 vs 21.9

6) . 08 vs .80

5) 23.04 vs 23.40



4) 23.14 vs 32.40

3) 28. 12 vs 28.02

2) 19.13 vs 19.31







THE DECIMAL PORTFOLIO



Complete your decimal portfolio by answering the questions below. Write the letter of your choice on the space before each number.

1. Which of t	he follo	wing decin	nal nu	mbers is g	reater	than 5. 03?
A)5. 01	B)	5. 02	C)	5. 00	D)	5.04
2. Which of t	the follo	wing decin	nal nu	mbers is le	ess tha	an 10.6?
A)11. 01 B) 10.7	C)	10. 8	5 D)	10.8	3
3. Which of t	:he follo	wing decin	nal nu	mbers is e	qual to	o 2.2?
A)2.22	B)	2. 02	C)	2.00	D)	2.20
4. The following numbers are greater than 3.5 except one.						
A)5. 3	B)	6. 3	C)	3. 05	D)	3.51
5. The follow	ing nun	nbers are l	ess th	an 3.5 exc	ept or	ne.
A)2. 5	B)	3. 6	C)	3. 05	D)	2.05



TRIVIA: Who was considered as the "Father of Decimal"?



THE LEARNING KIDS



Be one of the learning kids! Supply the box with desired answers per question.

 List down four decimal numbers that are greater than 8. 04 but less than 8. 40.

2. Give five decimal numbers that are greater than 0.5 but less than 0.7.

3. Enumerate eight decimal numbers that are less than or equal to 0.1.





SCIENCE EXPERIMENT



Make this Science Experiment of lovely kids a success by identifying if the following statements are TRUE or FALSE.

 Between 45.098 and 45.089, the second decimal is closer to 0 in the number line. 14.679 is closer to 15.18 compared to 14.05. Between 11.354 and 11.453, the second decimal is closer
to 0 in the number line.
4. 4.132 is closer to 8.18 compared to 4.05. 5th Grave 5. Among 6.156, 6.516, and 6.615, the first decimal has the
least value.
Explanation of your answer.
1.
2.
3.
4.

5.



MY MATH HOMEWORK



Help Ali answer his homework. He was asked by his teacher to identify the error on the given below. Write your answer on the space provided.

Which is greater 9.728 or 9.782?				
O N E S	A N D	T E N T H S	H U N D R E D T H S	T H O U S A N D T H S
9		7	2	8
9	_	7	8	2

Explanation:

The ones and tenths digit are the same but the hundredths digit of 9. 728 is greater than the same place value of 9. 782. Therefore, 9. 728 > 9. 782.



BOOK WORMS



Ana and Emily are school best friends. One thing they love in common is reading books. Answer the following situations below using your understanding of decimal numbers.

 According to Ana, she can read one whole fiction-themed novel in 4.185 hours. She is claiming that she is a faster reader than her older brother who can finish the same book in 4.5 hours. Is her claim valid? Explain your answer.

2. Ana and Emily had challenged themselves. They need to finish reading three books and they have to record the time they spent to finish them. The data are given below:

	Book 1	Book 2	Book 3
Ana	0.583 hrs	1.937 hrs	2.822 hrs
Emily	0.499 hrs	1.935 hrs	2.288 hrs

Who spent longer time to finish the three books? Explain your answer.





JUNIOR MATHEMATICIAN



Be the Junior Mathematician of the Week by comparing the following decimals using < , >, or =.

1. 65. 13 2.890 2.89

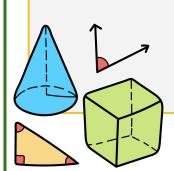
2. 0. 597 0. 917 0. 971

3. 1. 38 12. 38 38. 9

4. 5.489 5.982 5.936

5. 9. 12 0.980 0.98

Give at least three life scenarios where comparing decimals is important.





ANSWER GUIDE

Activity 1

1. D 2. C 3. A

5. A 4. B

6. C

7. D 8. D

Activity 2

1, 26.8 2, 21.1

3. 0.76

4. 2.21

5. 5.9

Activity 3

1. >

2. < 3. <

4. < 5. < 6. >

7. <

8. < 9. < 10. <

Activity 4

1. 23.04

2. 19.13 3.28.02

4. 23.14 5. 23.04 6. .08

7. 21.6 8. 24.03 9. 1.12

Activity 5

1. D

2. C

3. D

4. C

5. B The Father of

Decimal is Aryabhatta.

Activity 6

Answers may vary per learner.

The possible answers may be:

1. 8. 05, 8.06, 8.07, 8.08

2. 0.51, 0.52, 0.53, 0.54, 0.55

3. 0.1, 0.2, 0.3, 0.4, 0.5, 0.6,

0.7, 0.8

Activity 7

- 1. TRUE because the second decimal is less than the first one.
- 2. TRUE because 14.679 is greater than 14.05.
- 3. FALSE because 11.453 is greater than 11.354.
- 4. TRUE because 4.05 is less than 4.132.
- 5. TRUE, because the tenths digit of the first decimal is the lowest among the given.



ANSWER GUIDE

Activity 8

- 1. The explanation is not correct. The conclusion must be 9.728 <
- 9.782.

Activity 9

- 1. Yes, her claim is valid because 4.5 hours is greater than 4.185. having that, 4.5 is a slower time than 4.185.
- 2. Ana spent the longer time to read the three books. Her time, which were expressed in decimals, are greater than Emily's.

Activity 10

Answers may vary per learner.



Copyright Notice

This resource is licensed under the <u>Creative Commons</u> <u>Attribution-NonCommercial 4.0</u> International license.

You are free to:

- Share copy and redistribute the material in any medium or format
- Adapt remix, transform, and build upon the material

Under the following terms:

- Attribution You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- NonCommercial You may not use the material for commercial purposes.

For more information on this license, visit the following link:

http://creativecommons.org/licenses/by-nc/4.0/

Where possible, free-use images are sourced from online repositories such as Wikipedia and Wikimedia Commons. References and sources for images are provided in the speaker notes section of this document.

Thank you!



Thank you

Thank you so much for purchasing and downloading this resource.

We hope it has been useful for you in the classroom and that your students enjoy the activities.

For more teaching and homeschooling resources like this, don't forget to <u>come back</u> and download the new material we add every week!

Thanks for supporting **Helping With Math**. We can provide teachers with low-cost, high-quality teaching and homeschooling resources because of our loyal subscribers and hope to serve you for many years to come.

- The Entire Helping With Math Team :)

