

Have you ever seen a weightlifting championship? Or maybe you know someone with a weight bench?



Weights are a great way to see and feel how place value works.

Today you will be working in teams. One side is the **BLUE** team, the other side of the weight bar is the **GREEN** team. Follow the category directions carefully and become a weightlifting, place value Champion!

1. Cut out (and color) the weight plates. You should have 10 of each size.
(rectangles = ones, tens, hundreds; squares = one thousand, ten thousand, hundred thousand; circles = 1 million, ten million, hundred million).
2. Place tape or a thin strip of paper across the desk and have a cardboard divider or book so you can't see the other end of the bar.
3. Read the category and hang your weights.
4. One partner places the weights, and the other partner records the number in standard form. No talking! You don't want to let the other team know what you are placing.
5. When both teams are ready, remove the divider and compare the weights.
6. First compare the visual weights and see which is heavier
7. Now compare the standard form to determine which is heavier.
8. Record BOTH numbers in your chart.
9. Circle the place value that helped you know which was heavier. The team that has the heavier number earns 1 point. Record your points for that round.
10. If the numbers are EQUAL, then both teams earn 10 points.
11. Switch roles and continue play, making sure to follow the category name, record numbers, and compare.

Weightlifting: Comparing Multi Digit Whole Numbers

Math 4

Blue Team

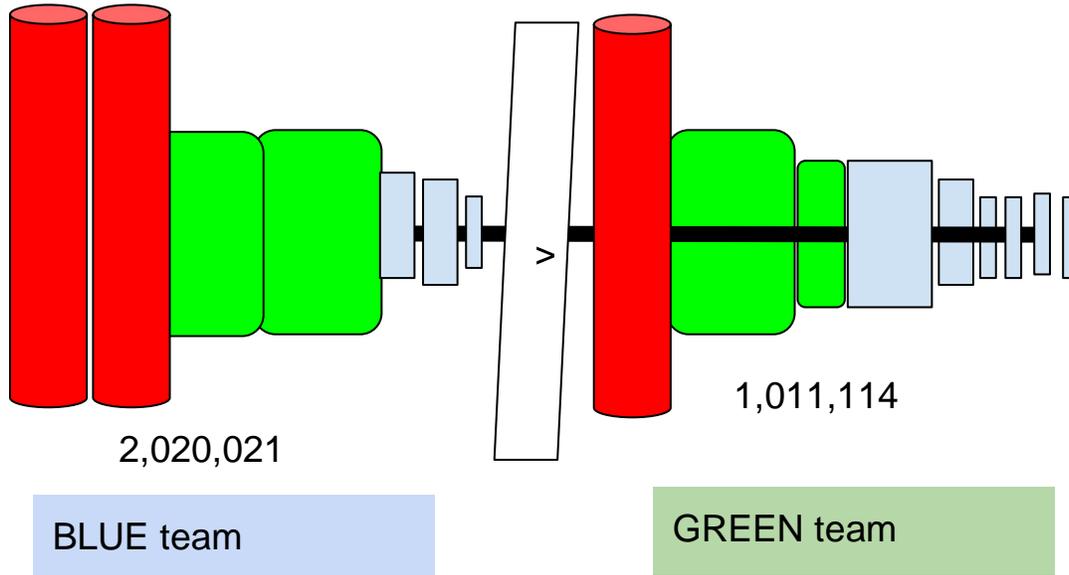


Green Team



- Record your numbers in the chart on the next page.
- Keep YOUR score on the worksheet.
- 1 point if your weights are heavier.
- 10 points if your weights are EQUAL to the other team.

Here is an example round:



Record BOTH numbers on your sheet!

Points:

The team with the heavier number earns 1 point.

If the weights are equal both teams earn 10 points.

My Team color is _____.

Weightlifting: Comparing Multi Digit Whole Numbers

Math 4

Category	Blue Team - Standard Form	Points scored	<, > or =	Green Team - Standard Form	Points scored
3 digit number					
6 digit number - using only 1,2,3 as digits					
Must contain 3 zeros					
Must have a 3 in the thousands place and no digit repeated					
Must have a 5 in the tens place and no digits higher than 5					
Closest to 100					
A 5 digit number using different digits in each place					
Closest to a million without using any 8s or 9s					
Free Play					

Weightlifting: Comparing Multi Digit Whole Numbers

Math 4

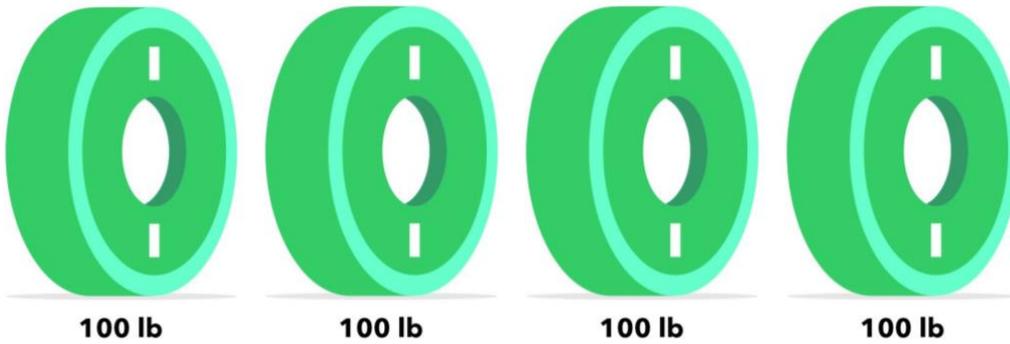
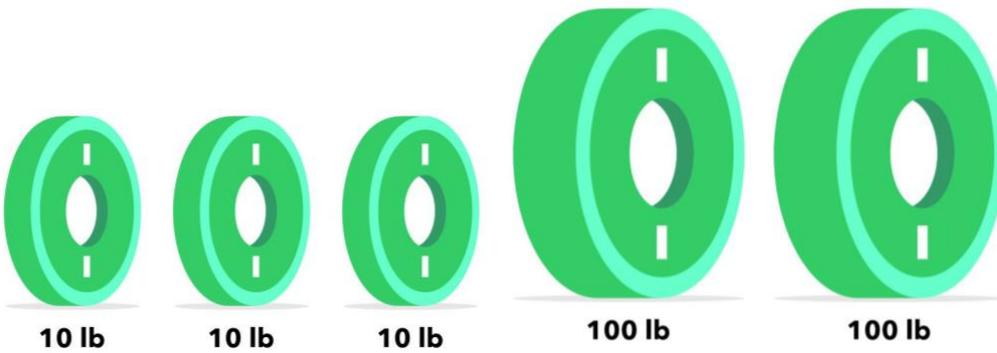
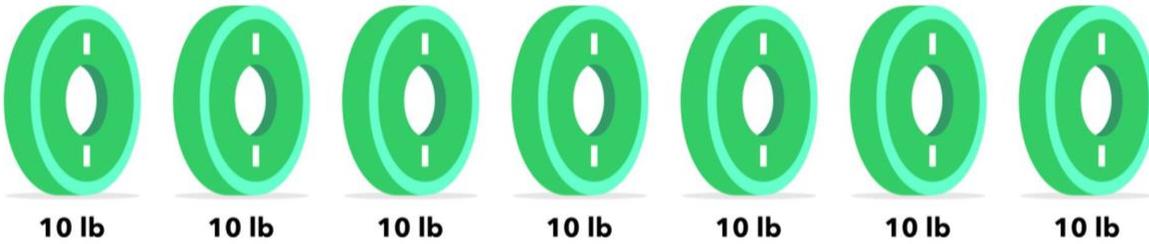
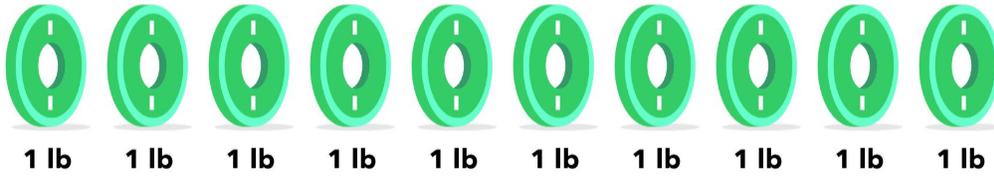
Reflection and questions:

1. Draw an image of the round “Closest to 100” and show the comparison.
2. How did you know when to put zeros in the standard form of a number?
3. Write the comparison of your closest round.
4. Write the comparison of the round that was the most “unbalanced” round.
5. Explain how the weights helped you compare.
6. What if you placed 13 blue rectangles (ten pounds). What would that be equal to? Show the bar with 13 blue rectangles. Then on the other side, balance the bar, but use different weight plates.
7. Come up with your own category and try it out. What was the category and the standard form of the numbers you created?

Weightlifting: Comparing Multi Digit Whole Numbers

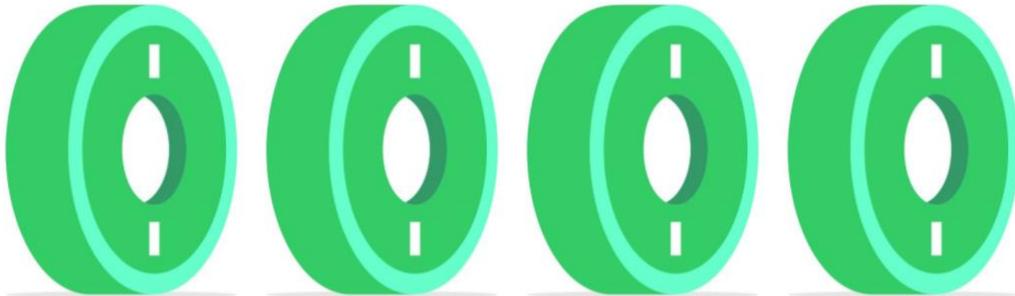
Math 4

Weight Plates - PRINT and CUT OUT



Weightlifting: Comparing Multi Digit Whole Numbers

Math 4



100 lb

100 lb

100 lb

100 lb



1 thousand lb



1 thousand lb



10 thousand lb



10 thousand lb

Weightlifting: Comparing Multi Digit Whole Numbers

Math 4



100 thousand lb



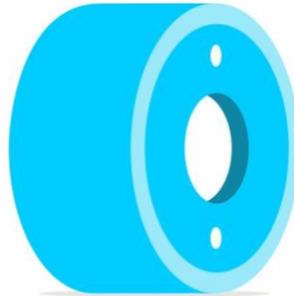
100 thousand lb



100 thousand lb



100 thousand lb



100 thousand lb



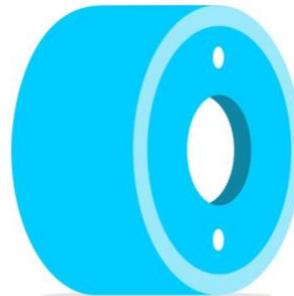
100 thousand lb



100 thousand lb



100 thousand lb



100 thousand lb



1 million lb



1 million lb

1 million lb

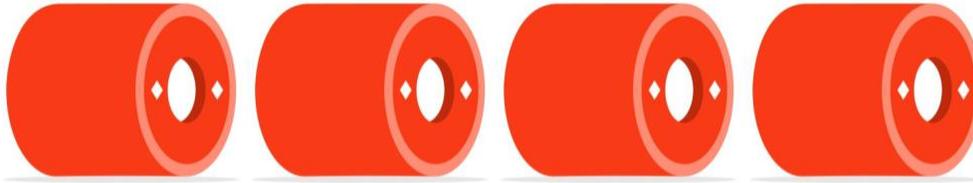
1 million lb

10 million lb

10 million lb

Weightlifting: Comparing Multi Digit Whole Numbers

Math 4

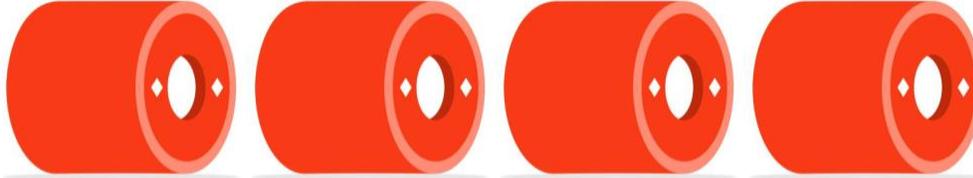


10 million lb

10 million lb

10 million lb

10 million lb

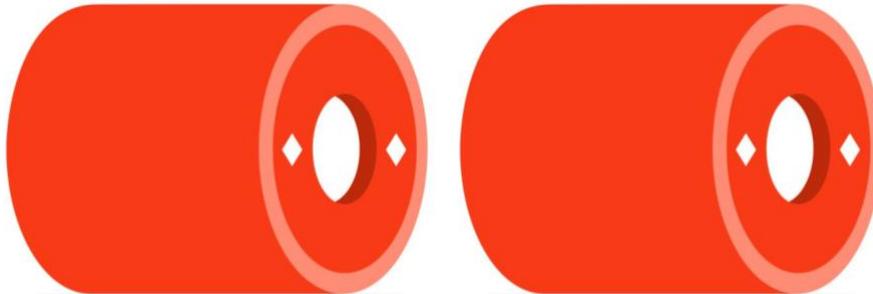


10 million lb

10 million lb

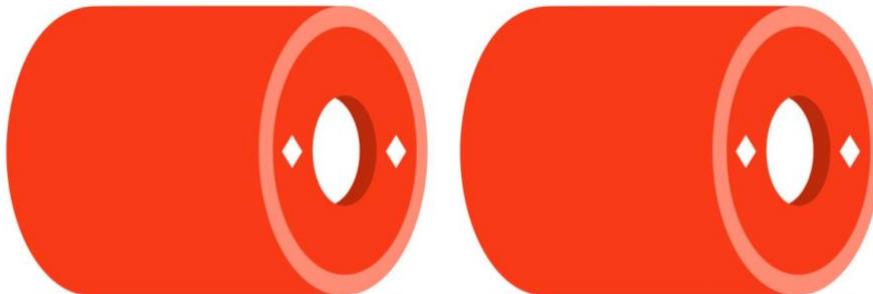
10 million lb

10 million lb



100 million lb

100 million lb



100 million lb

100 million lb

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100 million lb



100 million lb



100 million lb



100 million lb



100 million lb



100 million lb