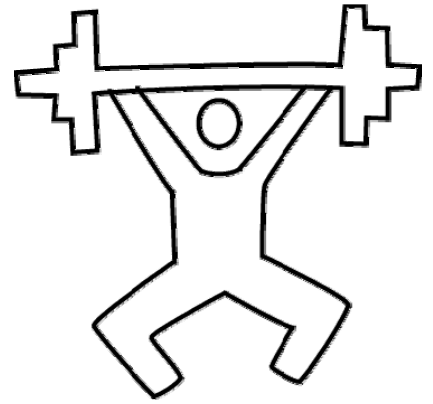Name _____

Metric Mass Step-By-Step Lesson

A paperclip weighs 1 gram. Marty was able to lift 85 kilograms over his head in his school's weight room. How many paperclips would Marty be able to lift over his head?

Explanation:

- The prefix "kilo-"means 1,000. This tells us that 1 kilogram = 1,000 grams.
- If a paperclip weighs 1 gram, if we find the number of grams that Marty lifted, this will be equal to the number of paperclips that he could lift over his head.

Convert the number of kilograms to grams:

$$\frac{1\ kg}{85\ kg} = \frac{1,000\ g}{x}$$

$$\frac{1\ kg}{85\ kg} \quad \frac{1,000\ g}{x}$$ (cross multiply)

X = 85,000 g

- This means that Marty could lift 85,000 paperclips over his head.
- Man, that's a lot of paperclips!