

pre-1982 : 3.1 g/penny

post-1982: 2.5 g/penny

Sample of 25 pennies

- ① Calculate # of pre & post 1982 pennies
- ② Calculate % abundance of each "isotope"

Equipment

- Balance
- Container w/ lid.

$$3.1x + 2.5y = \text{total mass}$$

$$3.1x + 2.5(25-x) = \text{total mass}$$

$$x + y = 25$$

$$y = 25 - x$$

$x = \text{pre}$
 $y = \text{post}$

$$\% \text{ pre} = \frac{x}{25} \times 100$$

$$\% \text{ post} = \frac{y}{25} \times 100$$