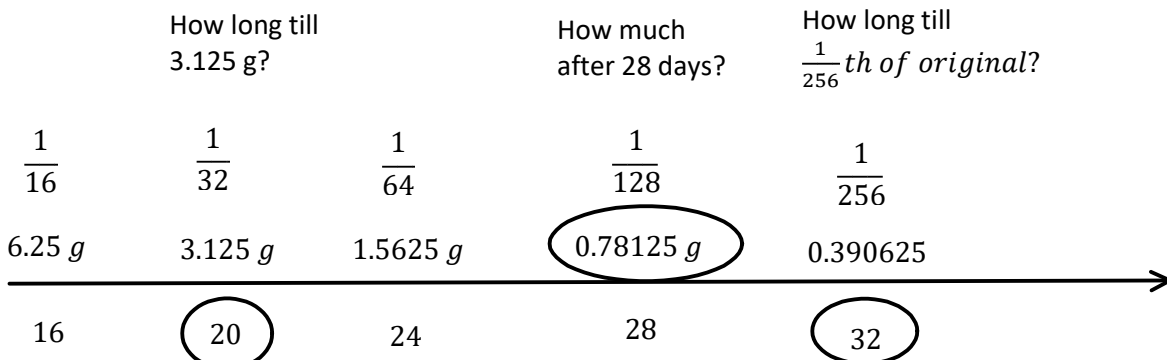
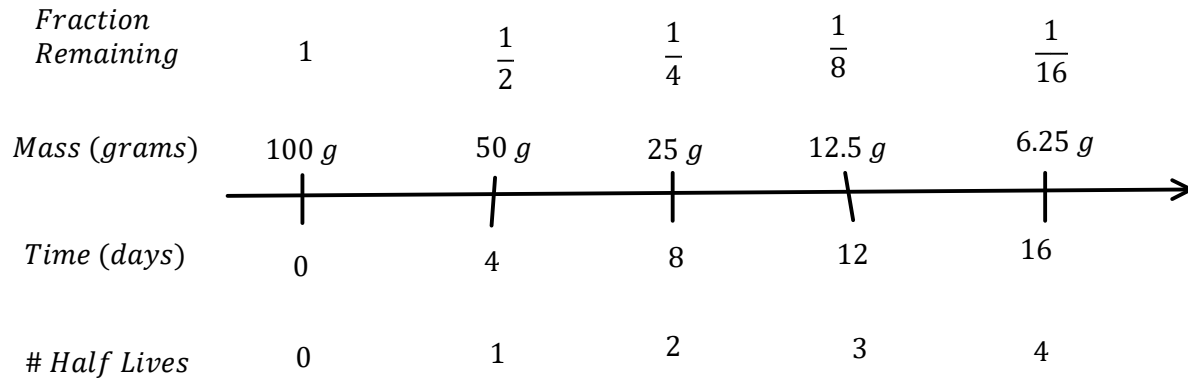


# C12 - 7.3 - Half Life (HL) Theory

Bananas have a half life of 4 days.

Half Life: Time to decay to half of the remaining mass.



$$F = P(r)^{\frac{t}{T}}$$

$$3.125 = 100 \left(\frac{1}{2}\right)^{\frac{t}{4}}$$

$t = 20 d$

$$F = P(r)^{\frac{t}{T}}$$

$$F = 100 \left(\frac{1}{2}\right)^{\frac{28}{4}}$$

$F = 0.78125 g$

$$F = P(r)^{\frac{t}{T}}$$

$$\frac{1}{256} = 1 \left(\frac{1}{2}\right)^{\frac{t}{4}}$$

$t = 32 d$

<i>t</i>	<i>g</i>
0	100
4	50
8	25
12	12.5
16	6.25
20	3.125
24	1.5625
28	0.78125
32	0.390625

