

Chapter 12 Assessment pg 406-407

#1-18

- 1) C
- 2) C
- 3) self-pollinating + same traits in offspring
- 4) cut away pollen-bearing male parts

- 5) a
- 6) C
- 7) C      $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

- 8) - inheritance units = genes
  - genes have 2 forms or alleles
  - sexual reproduction = diploid or 2 copies of genes
  - alleles for different genes may segregate independently

9) Y = yellow seed    y = green seed

	Y	y
Y	YY	Yy
y	Yy	yy

YY : 2Yy : yy  
 25% 50% 25%

10) d

11) a

	R	r
r	Rr	rr
r	Rr	rr

0% RR

12) gene with more than 2 alleles = multiple alleles  
polygenic traits are controlled by 2 or more genes

13) more possible combinations

14) no environmental conditions can affect gene expression

15) d

16) d

17) b

18)  $2N=8$        $N=4$  or 4 chromosomes in  
each haploid gamete