**Genetics Worksheet 11-1 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. What is “genetics”?

2. List 2 things that you posses that were inherited from your family. These could be physical traits (eye, hair color, height) or personality traits:

a)

b)

3. List 2 facts about Gregor Medel:

a)

b)

4. What does fertilization mean?

5. What do you think “self – pollinating” means in plants?

6. What is a trait?

List 2 of them for pea plants:

1)

2)

7. What does the F1 generation mean?

8. Looking at Figure 11-3, what 2 seed shapes are there? \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. What 2 seed colors are there? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. What 2 pod colors are there? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. What is your definition of a gene:

12. What does the Principal of Dominance state:

13. What is F2?

14. Do recessive alleles really disappear completely?

15. What generation do they reappear in? \_\_\_\_\_\_\_

16. What is another word for segregation? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. What are gametes?

18. Is a dominant allele represented by a capital or lower case letter? \_\_\_\_\_\_\_\_\_

19. OK – back to Figure 11 – 3 : Which seed shape is dominant and came through in the F1? \_\_\_\_\_\_\_\_

20. Which pod shape is dominant? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

21. Which plant height is dominant? \_\_\_\_\_\_\_\_\_\_\_\_\_

22. This isn’t in your reading, but let’s see what you know about dominants. Which eye color is dominant – blue or brown? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

23. What skin color is dominant – darker or lighter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24. Do you remember Punnett Squares from 7th grade? Let’s try one:

Fill in the 4 boxes below with a cross between a tall plant (TT) and a short plant (tt):

|  |  |
| --- | --- |
|  |  |
|  |  |

What do all 4 of the offspring come out as? \_\_\_\_\_\_\_\_\_ Would this look like a tall plant or short plant?

