Show each of the following bits of data using the proper type of graph.

1. The results of a dihybrid cross are in the ratio of 9 double dominant offspring, 3 offspring which are dominant for the first trait and recessive for the second trait, 3 offspring which are recessive for the first trait and dominant for the second trait, and 1 offspring which is a double recessive.

2. The following data is collected trough observation over a period of 3 weeks:

Day	#green maple leaves	#green aspen leaves
1	50	50
3	50	50
5	50	49
7	49	49
9	49	49
11	48	49
13	48	49
15	48	47
17	48	47
19	47	47
21	47	47

3. The percent abundance of elements in the earth's crust is: oxygen—47%, iron—28%, aluminum—8%, the combination of calcium, magnesium, sodium, and potassium—16%, and all other elements—1%.

4. The time required for complete digestion of three samples of protein were as follows:

Substance added to test tube	Condition of egg	Digestion time (hours)
HCl only	Whole	38
HCl only	Chopped	16
Pepsin only	Whole	32
Pepsin only	Chopped	11
HCl and Pepsin	Whole	8
HCl and Pepsin	chopped	3

5. The human body contains the following elements by percentage: oxygen—65%, carbon—18.5%,hydrogen—9.5%, nitrogen—3.3%, phosphorus-1.0%. Other elements comprise the balance.

6. A comparison of the atomic radius of Group I Alkali Metals with the ion radius of these same metals is shown below. Radii are measured in picometers.

Element	Atomic Radius	Ionic Radius
Lithium	151	55
Sodium	181	101
Potassium	226	144
Rubidium	248	150
Cesium	262	161

7. Boyle's Law shows that there is an inverse relationship between pressure and volume. Given the data below, show this relationship.

Trial	Pressure (atm)	Volume (L)
1	0.563	11.1
2	0.961	6.48
3	1.49	4.18
4	1.95	3.19
5	3.08	2.02

8. The first ionization energy of elements of the second period of the periodic table is shown in the table below. Ionization energy (IE) is measured in kJ/mol.

Element	Atomic #	# of valence e^-	IE (kJ/mol)
Lithium	3	1	520
Beryllium	4	2	900
Boron	5	3	800
Carbon	6	4	1086
Nitrogen	7	5	1402
Oxygen	8	6	1314
Fluorine	9	7	1681
Neon	10	8	2080

9. The cell cycle is made of three major parts: interphase, mitosis, and cytokinesis. Although the time through a cell cycle varies depending on the type of cell, a representative cell cycle would be:
Interphase—23 hours and consisting of Gap 1 lasting 10 hours, Synthesis lasting 9 hours, and Gap 2 lasting 4 hours; Mitosis—45 minutes; Cytokinesis—15 minutes