

Chromosome Number Worksheet

Complete the table below to indicate the number of homologous chromosome pairs, diploid number ($2n$) and the haploid number (n) for each species.

	Organism	# of homologous chromosome pairs	Haploid # n	Diploid Number $2n$
1.	Human	23	23	$2(23) = 46$
2.	Orangutan	24	24	$2(24) = 48$
3.	Alligator	—	—	32
4.	Apple	17	—	—
5.	Bat	—	22	—
6.	Chicken	—	—	78
7.	Camel	35	—	—
8.	Fruit Fly	4	—	—
9.	Goat	—	—	60
10.	Gold Fish	—	—	94
11.	Gorilla	24	—	—
12.	Guinea Pig	32	—	—
13.	Horse	—	32	—
14.	House Fly	—	—	12
15.	King Crab	104	—	—
16.	Leopard Frog	—	—	26
17.	Lettuce	—	9	—
18.	Mosquito	—	3	—
19.	Opossum	—	—	22
20.	Pea	7	—	—
21.	Potato	—	—	48
22.	Rice	12	—	—
23.	Rose	—	7	—
24.	Wheat	—	—	42

Using the information in the table, above, answer the following questions:

25. How many chromosomes would you find in the egg cell of a leopard frog? _____
26. How many chromosomes would you find in the gametes of a leopard frog? _____
27. How many chromosomes would you find in a somatic cell of a gorilla? _____
28. How many chromosomes would you find in a sperm cell of a male gorilla? _____
29. How many chromosomes would you find in the pollen cells of a rice plant? _____
30. How many chromosomes would you find in the leaf cells of a rice plant? _____
31. How many chromosomes would you find in the liver cells of an opossum? _____
32. How many chromosomes would you find in stem cells from a wheat plant? _____
33. How many chromosomes would you find in an ovum from a rose plant? _____
34. How many chromosomes would you find in the cells of a rose petal? _____
35. How many chromosomes would you find in leaf cells from a lettuce plant? _____
36. How many chromosomes would you find in a guinea's gametes? _____
37. How many chromosomes would you find in a guinea pig zygote? _____
38. How many chromosomes would you find in guinea pig stomach cells? _____
39. How many chromosomes would you find in guinea pig somatic cells? _____
40. How many chromosomes would you find in guinea pig egg cells? _____
41. How many chromosomes would you find in the cells of a lettuce seed (this is equivalent to an embryo)? _____
42. How many chromosomes would you find in a potato plant's diploid cells? _____
43. How many chromosomes would you find in a potato plant's haploid cells? _____
44. If a king crab has 104 pairs of homologous chromosomes, how many chromosomes would be in its egg cells? _____
45. If a king crab has 104 pairs of homologous chromosomes, how many chromosomes would be in its zygote? _____