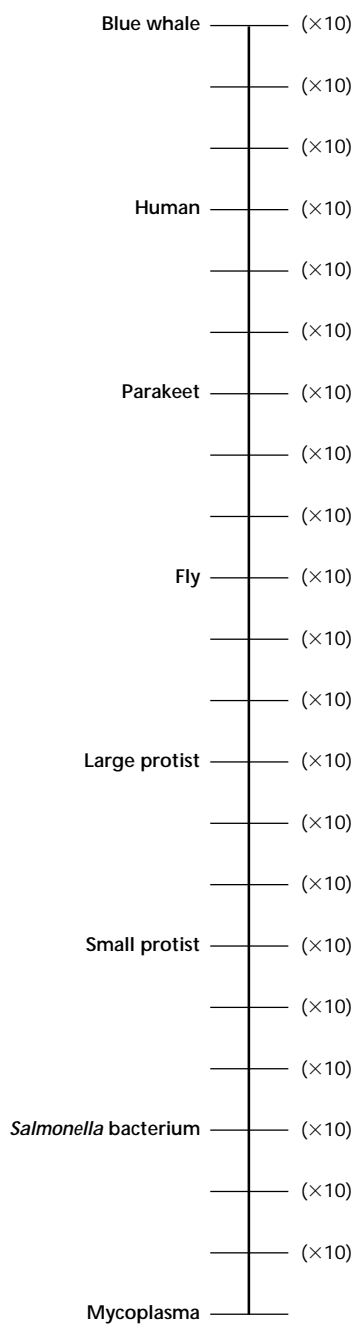


Scale of Organisms

Use the SI system to compare the sizes of some of the smallest and largest organisms on Earth.



Mass is the amount of matter that composes an object or living thing. Look at the scale showing the range of masses of living things. Each division of the scale represents a factor of 10, in terms of the mass of the organism. For example, the blue whale, which is the largest animal alive today, is three divisions above a human. Its mass is therefore $10 \times 10 \times 10$ (or 1000 times) the mass of a human. In the same way, a human has a mass 1000 times that of a parakeet.

Use the scale to complete the following exercises:

1. The parakeet has a mass 1000 times that of what other living thing?

2. A large protist has a mass _____ times that of a small protist.
3. A *Salmonella* bacterium has a mass 1000 times that of a _____.
4. A small protist has a mass _____ times that of a mycoplasma.
5. A human has a mass _____ times greater than a large protist.
6. A fly's mass is 1,000,000,000 times greater than a _____.
7. A blue whale is 25 m long, while a mycoplasma is 0.3 μm long. How many mycoplasmas placed end to end would stretch from one end of the whale to the other?
