

LESSON
1-3 **Challenge**
Have a Ball!

The most commonly used metric units of mass are **milligrams (mg)**, **grams (g)**, and **kilograms (kg)**. However, there are other metric units of mass also. These units include **centigrams (cg)**, **decigrams (dg)**, **decagrams (dag)**, and **hectograms (hg)**. The table below shows the equivalent number of grams for each of these units.

Unit	1 kg	1 hg	1 dag	1 g	1 dg	1 cg	1 mg
Number of Grams	1,000 g	100 g	10 g	1 g	0.1 g	0.01 g	0.001 g

The table below shows the masses of balls that are used in different sports. Rewrite the table so that it shows the balls and their masses in order from greatest mass to least mass. Use the same unit to show each mass.

Ball	Mass
Baseball	14.88 dag
Basketball	0.65 kg
Football	4,252 dg
Paddleball	6,502 cg
Ping pong ball	2,450 mg
Softball	198.4 g
Soccer ball	4.536 hg
Tennis Ball	750 dg
Volleyball	28,000 cg

Ball	Mass