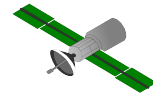


# Satellites and CubeSats

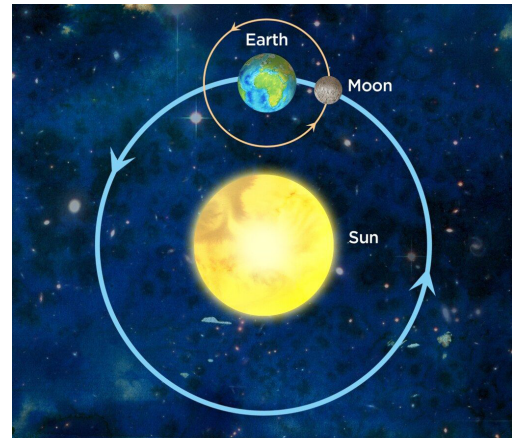
## Teacher/Parent Guide



M.1.1, 1.2, 1.4, 1.5, 1.6, 1.8

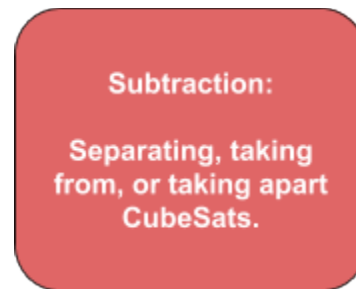
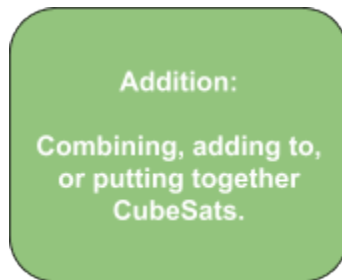
What is a satellite? A **satellite** is an object that orbits, revolves, or flies around a larger object. The moon is a satellite because it flies around the Earth! And Earth is a satellite because it flies around the sun! But we can make satellites, too!

So what is a CubeSat? A **CubeSat** is a very small satellite. A single-unit CubeSat is only **10x10x10 centimeters**. However, many of these “units” can be **put together** to make one larger CubeSat. Common United States standard configurations range from one unit (or “1U”) to a **54U**!

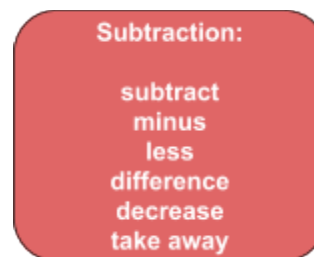
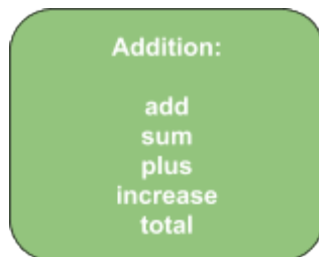


### Building CubeSats

You can add or subtract from CubeSats to make them bigger or smaller! What does that mean?



Here are some words we use to describe what we do when we find the total number of units in a CubeSat after adding or subtracting:



After going over addition and subtraction, Help Big Al™ build some CubeSats with ones he already has in the **Worksheet First Grade M.1.1,2,4**. This will work on addition and subtraction through ten. There is an answer key on pages 3 and 4.

Once mastering addition and subtraction through ten, move onto **Worksheet First Grade M.1.5,6,8** to practice addition and subtraction through twenty. There is an answer key on pages 7 and 8.

