



Topic C

Comparison of Weight

K.7A, K.7B

Focus Standards:	K.7A	Give an example of a measurable attribute of a given object, including length, capacity, and weight.
	K.7B	Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.
Instructional Days:	5	
Coherence	-Links from:	GPK–M4 Comparison of Length, Weight, Capacity, and Numbers to 5
	-Links to:	G1–M3 Ordering and Comparing Length Measurements as Numbers

In Topics A and B, students compared length and height; now, in Topic C, they compare the weight of objects, progressing from informal comparisons of objects (comparing the weight of a book to that of a pencil by picking them up) to using balance scales when greater precision is necessary or desired.

In Lesson 8, students compare the weight of a book to the weight of an eraser and other objects they find. Students then use the weight of the book as a benchmark and find other objects to compare with the weight of the book. “This eraser is lighter than my book. The bag of blocks is heavier than my book.”

In Lesson 9, students use a balance scale as a tool to compare the weights of objects that are approximately the same and thus more difficult to compare. For example, “My pencil is lighter than this marker.”

In Lesson 10, the measurement becomes more precise as a set of pennies is used to directly compare the weight of objects. Students use a balance to determine that the pencil weighs the same as 5 pennies. The marker weighs the same as 9 pennies. The students compare one object to another, a set and a solid object. They stay within kindergarten standards by not comparing the number of pennies each object weighs; instead they simply enjoy the exploration of finding the set of pennies that weighs as much as an object.

In Lesson 11, students observe conservation of weight. They place, for example, two balls of clay of equal weight on either side of a balance scale. They break one of the balls into two smaller balls and observe the two sides of the scale are still balanced. Students then break the single ball into three smaller balls and observe the same thing. The lesson continues with a sequence leading back to the two balls once again balancing after all the permutations.

In Lesson 12, they extend their learning to use different units to compare the weight of the same item using different objects. “The pencil weighs the same as a set of 5 pennies. The pencil weighs the same as a set of 10 little cubes.”

A Teaching Sequence Toward Mastery of Comparison of Weight

- Objective 1:** Compare using *heavier than* and *lighter than* with classroom objects.
(Lesson 8)
- Objective 2:** Compare objects using *heavier than*, *lighter than*, and *the same as* with balance scales.
(Lesson 9)
- Objective 3:** Compare the weight of an object to a set of unit weights on a balance scale.
(Lesson 10)
- Objective 4:** Observe conservation of weight on the balance scale.
(Lesson 11)
- Objective 5:** Compare the weight of an object with sets of different objects on a balance scale.
(Lesson 12)