Lesson 1: Thinking About Balance
Students balance a symmetrical object (butterfly) on a pencil. They observe the effect when weight is added.

Lesson 2: Building Structures That Balance
Students build structures that balance and share their observations about balancing.

Lesson 3: Exploring the Beam Balance
Students make a beam balance and explore how the amount of weight and position of weight affect balance.

Lesson 4: Moving the Fulcrum
Students balance a beam with Unifix Cubes by changing the position of the fulcrum.

Lesson 5: Building Mobiles
Students build simple mobiles that balance.

Lesson 6: Exploring the Equal Arm Balance
Students assemble and use an equal-arm balance to compare objects. They compare this tool with the balance beam.

Lesson 7: Using the Equal-Arm Balance to Compare Objects
Students use an equal-arm balance to compare objects and use binary symbols to record comparisons.

Lesson 8: Developing Strategies for Placing Objects in Serial Order
Students use the equal-arm balance to help them place four objects in serial order from lightest to heaviest.

Lesson 9: Placing Six Objects in Serial Order
Students predict where two new objects will fit in their serial order and then use the equal-arm balance to place all six objects in order.

Lesson 10: Balancing with Unifix Cubes
Students use Unifix Cubes as units of measure to balance objects on an equal-arm balance.

Lesson 11: Graphing the Weights of the Objects
Students make bar graphs that show the weights of six objects.

Lesson 12: Describing the Four Foods
Students observe and describe the properties of four different foods.

Lesson 13: Comparing Cupfuls of Food
Students predict serial order for a cupful of each of four foods, from lightest to heaviest, and then compare the weights of each.

Lesson 14: Weighing Cupfuls of Food
Students weigh an equal volume (cupful) of each of four foods and record the weights on a class line plot.

Lesson 15: Which Food Occupies the Most Space?
Students measure out equal weights of four foods and compare their volumes.

Lesson 16: Where Are the Six Marbles?
Students design and conduct an investigation to discover which of five sealed canisters contains six marbles.

Sub-concept: The weight of an object is not solely determined by its volume.

Sub-concept: Balance is affected by the amount of weight, the position of weight, and the position of the fulcrum.

Sub-concept: Weighing is the process of balancing an object against a certain number of units.

K-12 Unifying Concept: Our physical world is made of substances, materials, and objects that can be identified by their unique properties, and is organized into systems that are interconnected.