# Hands-On Standards®, Common Core Fractions
## Grade 3
## SCOPE AND SEQUENCE

**3 Units**
**12 Lessons**
**5 Fractions ExplorActions (Labs)**

| Unit / Lesson / Lab | Grade 3 Lesson Objective | CCSS | Manipulative(s) | Description |
|---|---|---|---|---|
| **Unit 1: Understand Fractions** | | | | |
| Lesson 1 | Identify a unit fraction as part of a whole. | 3.NF.A.1 | Geoboard | Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$. |
| **Fractions ExplorAction 1 (Lab)** | **Investigate unit fractions.** | **3.NF.A.1** | **Cuisenaire Rods** | **Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$.** |
| Lesson 2 | Identify a proper fraction as some number of parts of a whole. | 3.NF.A.1 | Fraction Circles | Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$. |
| Lesson 3 | Given a fractional part, build the whole. | 3.NF.A.1 | Geoboard | Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$. |
| Lesson 3 | Given a fractional part, build the whole. | 3.NF.A.3c | Geoboard | Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.* |
| Lesson 4 | Identify a unit fraction on a number line. | 3.NF.A.2a | Fraction Towers<br>Fraction Number Line (blank line) | Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into $b$ equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. |
| Lesson 5 | Identify a proper fraction on a number line. | 3.NF.A.2b | Fraction Towers<br>Fraction Number Line (blank line) | Represent a fraction $a/b$ on a number line diagram by marking off $a$ lengths $1/b$ from 0. Recognize that the resulting interval has size $a/b$ and that its endpoint locates the number $a/b$ on the number line. |
| Lesson 6 | Measure lengths involving whole, half, and quarter inches. | 3.NF.A.2b | Beginner Ruler | Represent a fraction $a/b$ on a number line diagram by marking off $a$ lengths $1/b$ from 0. Recognize that the resulting interval has size $a/b$ and that its endpoint locates the number $a/b$ on the number line. |
| **Fractions ExplorAction 2 (Lab)** | **Investigate intervals on a number line.** | **3.NF.A.2b** | **Cuisenaire Rods<br>Fraction Number Line (blank line)<br>Beginner Ruler** | **Represent a fraction $a/b$ on a number line diagram by marking off $a$ lengths $1/b$ from 0. Recognize that the resulting interval has size $a/b$ and that its endpoint locates the number $a/b$ on the number line.** |
| **Unit 2: Equivalent Fractions** | | | | |
| Lesson 1 | Identify equivalent fractions by recognizing they are the same size. | 3.NF.A.3a | Fraction Circles | Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. |

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| **Lesson 2** | Identify equivalent fractions by their location on a number line. | 3.NF.A.3a | Fraction Towers Fraction Number Line (blank line and double line) | Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. |
| **Lesson 3** | Find equivalent fractions in simplest form. | 3.NF.A.3b | Fraction Circles | Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model. |
| **Fractions ExplorAction 1 (Lab)** | **Investigate equivalent fractions.** | **3.NF.A.3b** | **Cuisenaire Rods Fraction Number Line (blank line)** | **Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model.** |
| **Fractions ExplorAction 2 (Lab)** | **Express whole numbers as fractions.** | **3.NF.A.3c** | **Cuisenaire Rods Fraction Number Line (blank line)** | **Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.*** |

## Unit 3: Compare and Order Fractions

| Unit / Lesson / Lab | Grade 3 Lesson Objective | CCSS | Manipulative(s) | Description |
|---|---|---|---|---|
| **Lesson 1** | Compare fractions with a common denominator. | 3.NF.A.3d | Fraction Circles | Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. |
| **Lesson 2** | Compare fractions with a common numerator. | 3.NF.A.3d | Fraction Circles | Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. |
| **Lesson 3** | Compare fractions to one-half. | 3.NF.A.3d | Fraction Circles | Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. |
| **Fractions ExplorAction 1 (Lab)** | **Compare fractions.** | **3.NF.A.3d** | **Cuisenaire Rods Fraction Number Line (blank line)** | **Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.** |