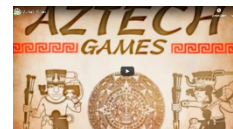


# Standards

Aztech: The Story Begins  
Janna Jensen, October 2020



## Aztec: The Story Begins

This app from 7 Generation Games is geared towards students in grades 5-7 and focuses on fractions and statistics. Throughout, the game, students will be presented with Aztec history. Students will be faced with fraction and statistic examples, leading to similar problems that need to be solved. There are goals set throughout the application.

### Plays on:

Chromebook, Mac or Windows computers in browser. Downloadable from app store for iPads.

### Standards – Common Core and North Dakota State

#### Grade 3:

**3.NF.A.1** Understand a fraction  $a/b$  as the quantity formed by a parts of size  $1/b$ .

#### Grade 5:

**5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result  $2/5 + 1/2 = 3/7$ , by observing that  $3/7 < 1/2$ .

**5.NF.B.3** Interpret a fraction as division of the numerator by the denominator ( $a/b = a \div b$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret  $3/4$  as the result of dividing 3 by 4, noting that  $3/4$  multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size  $3/4$ . If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?

**5.NF.B.4** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

**5.NF.B.6** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

#### Grade 6:

**6.SP.5.c** Calculating quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered.

#### Grade 7:

**7.SP.A.1** Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

**7.NS.2** Apply and extend previous understandings of multiplication, division, and fractions to multiply and divide rational numbers.

**7.EE.3** Solve multi-step real-life and mathematical problems posed with rational numbers in any form (positive and negative, fractions, decimals, and integers), using tools strategically. Apply properties of operations to calculate with numbers in any form. Convert between forms as appropriate. Assess the reasonableness of answers using mental computation and estimation strategies.

**7.SP.1** Understand that statistics can be used to gain information about a population by examining a sample of the population. Understand that generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

**5.NF.6** Solve real world problems involving multiplication of fractions and mixed numbers using visual fraction models and equations to represent the problem.

**5.NF.7** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

**5.NF.7.c** Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions using visual fraction models and equations to represent the problem.