



# FAQ and Common Core

Episode 1:  
DAWN OF DISORDER



# FAQ



**Q: Why are fractions so difficult to learn?**

**A:** It makes sense to count sheep or cows, but objects are “wholes” not fractions. Fractions are an abstract concept because a fraction is only defined in relation to something else. We do not see anything in nature that is exactly one-half. Also, fractions introduce non-intuitive conventions such as in unit fractions where the larger denominators mean smaller fractions (e.g.  $1/5 > 1/7$ ).



**Q: How is Monsters vs. Fractions unique?**

**A:** Most fraction games assume the student has background knowledge and then attempts to reinforce these concepts through repetition. Monsters vs. fractions introduces fundamental concepts and then builds upon them gradually, all within the framework of a rich narrative and modern game mechanics while allowing students to explore without penalizing their mistakes.



**Q: Is Monsters vs. Fractions aligned to common core?**

**A:** Yes, each of the game stages has been designed to enable learning objectives aligned to Common Core standards (see the guide in the following section for details).



**Q: Are new games coming in the future?**

**A:** We hope you enjoyed our first game that focuses on Unit Fractions; we will be releasing subsequent titles that progress the user through additional fraction-related concepts so please stay tuned!



**Q: Is Monsters vs. Fractions Free?**

**A:** Yes, Monsters vs. Fractions Episode 1 (Unit Fractions) is available to teachers and parents at no cost, however future titles and/or premium features may require either a login or a subscription.



# FAQ



**Q: What are the system requirements?**

**A:** For laptops and PC's, modern web browsers such as Safari, Chrome or Edge are ideal. Compatibility of mobile versions will be detailed within their respective app stores.



**Q: Can I customize the questions or content?**

**A:** This game has been designed with specific learning objectives in mind and therefore the content cannot be customized. If you would like to explore creating activities with your own content, check out SMART Learning Suite ([suite.smarttech.com](https://suite.smarttech.com))



**Q: Does Monsters vs. Fractions collect personal information?**

**A:** No, the game does not collect any personally-identifiable information. Please view our [privacy policy](#) for more information.



**Q: How can students share their progress?**

**A:** Students can share progress to either teachers or parents from within the 'Achievements' section. Just look for the trophy icon in the lower-left corner of the application's window:



**Q: Why is Monsters vs. Fractions blocked by my district?**

**A:** For security purposes, some school districts only allow certain access to specific websites. If this appears to be the case, reach out to your district IT team and let them know you'd like to 'whitelist' [www.monstersvsfractions.com](https://www.monstersvsfractions.com)



# FAQ



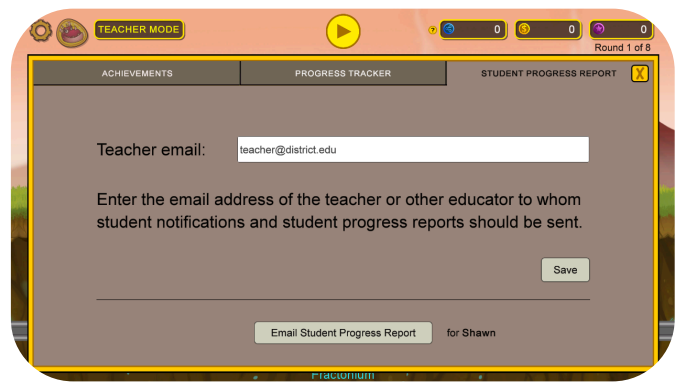
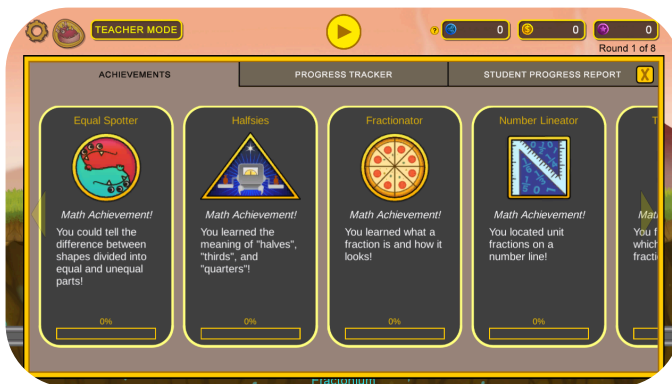
**Q: What is Teacher Mode?**

**A:** We understand that teachers have specific needs and workflows that are distinct from parents and students. For example, rather than progressing through the various game levels sequentially, Teacher Mode allows users instant access any point within the game which is perfect for a previewing content, grabbing screenshots for instruction, or for modelling in front of class.



**Q: As a teacher, how to I view student progress?**

**A:** Go to the 'Student Progress Report' tab, verify the correct email address, and select 'Email Student Progress Report'



In addition, if students appear to be struggling, teachers will receive an automatic notification via email allowing teachers to quickly intervene if necessary.

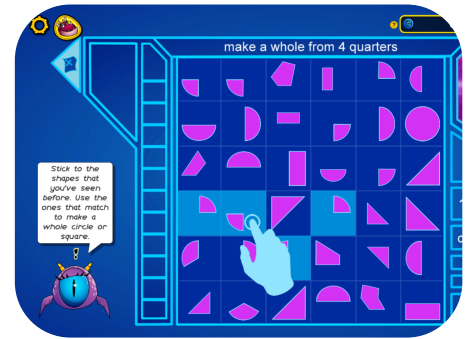


# Common Core

## Stage 1: Portal Machine

### CCSS.MATH.CONTENT.3.NF.A.1

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  $1/b$ .



- Slice circles & squares into halves & quarters. | Levels 1-2
- Join halves and thirds to form a circle or square. | Levels 3-7
- Join halves, thirds, quarters, and fifths to form a circle, square or pentagon. | Levels 8-12
- Select 6 or fewer congruent squares to form a shape divided into halves, thirds, quarters, fifths or sixths. | Levels 13-17
- Display a unit fraction expressed in words, by selecting a  $1/n$  part of the shape, where  $n = 2, 3, 4, 5$ , or  $6$ . | Levels 18-19
- Display the unit fraction  $1/n$ , by selecting a  $1/n$  th part of the shape, where  $n = 2, 3, 4, 5$ , or  $6$ . | Levels 20-21
- Join  $n$  segmented rectangles to form a larger rectangle divided into  $n$  equal parts, where  $n = 2, 3, 4, 5$ , or  $6$ . | Levels 22-24
- Join  $n$  segmented rectangles to a colored segmented rectangle to display  $1/n$ , where  $n = 2, 3, 4, 5$ , or  $6$ . | Levels 25-27
- Identify a set of dots with one  $n$ th of the dots colored, where  $n = 2, 3, 4, 5$  or  $6$ . | Levels 28-29



# Common Core

## Stage 2: Catapult

### CCSS.MATH.CONTENT.3.NF.A.2.A

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

- Estimate the location of the unit fraction  $1/n$  between 0 and 1 on the number line for  $n = 2, 3$ , and 4. | Levels 1-2
- Estimate the location of the unit fraction  $1/n$  between 0 and 1 on the number line for  $n \leq 6$ . | Levels 3-8



## Stage 3: Fractonium Mine

### CCSS.MATH.CONTENT.3.NF.A.3.D

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.

- Identify which of the two unit fractions is greater. | Levels 1-8

