

Student #1

Pronouns: he/his/him

Education: 3rd grade of public school

View about mathematics: very enthusiastic/positive

Character: friendly and open

Report by: Anel Mengdigali

Location: Kazakhstan, Almaty, Zhumabayeva street 106, 37.

Date: April 3, 2020

Session Start Time: 17:30

Session End Time: 18:05

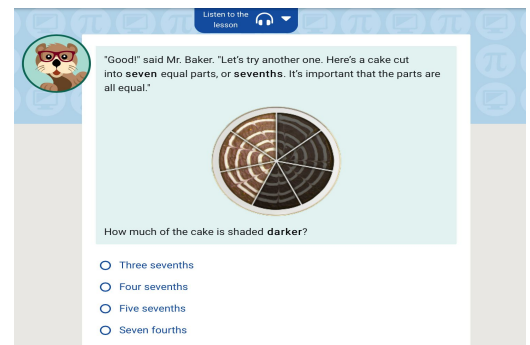
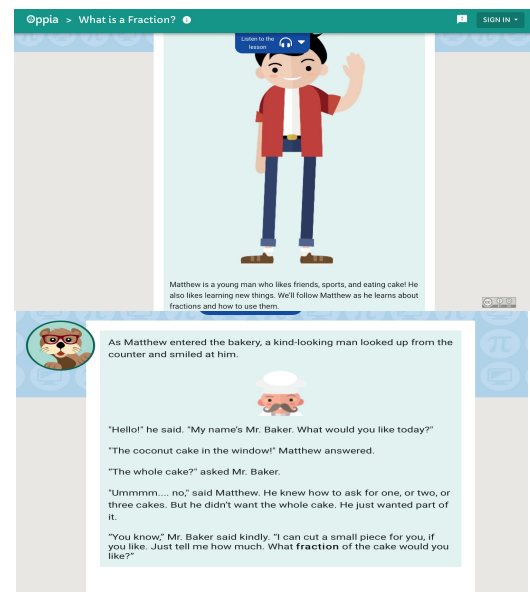
Lesson: https://www.oppia.org/explore/umPkwp0L1M0-?collection_id=4UgTQUc1tala

Note 1

He needed sufficient time to complete the reading of the beginning pages. In this case, I think it is not about the number of words in those pages, but it is about the simple design in which information was presented. I suggest the information should be given in a visually easy way to understand. I offer to make more emphasis on the main topic on the first page since for younger students this will be better to understand the main idea and purpose of the lesson. Moreover, it will be good for them to remember the learned lesson of mathematics for the future. Otherwise, I suggest adding some more interesting illustrations for the second page.

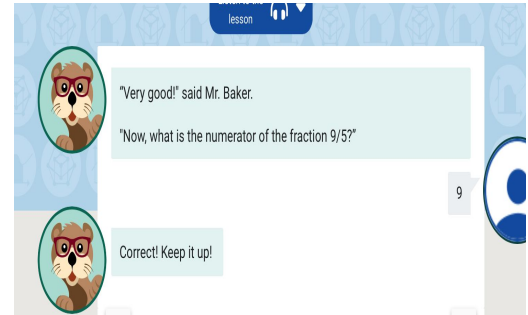
Note 2

He got confused with the image of the cake, and wrote an answer for the not shaded part at the first try. Even after it, his right answer took much time. I think it will be better to ask about the non-darker parts of the cake. I suppose users automatically will think of darker parts as crossed and shaded regions as those that should be ignored or not important. Alternatively, I want to suggest adding more colors for the image of the cake, so that darker and not darker parts would differ significantly, and this will also be more interesting.



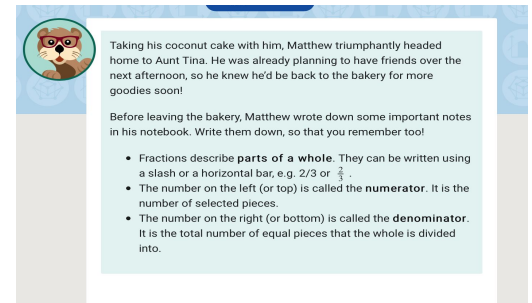
Note 3

He did not know how to answer such a question, where the numerator is bigger than the denominator since that case of fractions was not covered before. I helped with answering the question, and the student got an explanation for such a case after the question. I believe it will be better to first provide information, and then ask for it since some users might be not confident to answer such questions by themselves.



Note 4

He wants to choose the parts of the coconut cake with the character Matthew as buying some part of the cake for his aunt was the main goal of Matthew at the beginning of the lesson. However, the lesson finished with Matthew having the whole cake for his aunt. Thus, I think it will be more logical to supplement questions set with another question for allowing the user to help Matthew to choose some parts of the cake.



General Notes

He was willing to continue learning with the Oppia. I provided links for the other two topics to him as he was very excited. Mainly, the student was very surprised by such learning techniques, and he wished to keep studying in that way.

Student #2

Pronouns: she/her/hers

Education: 7th grade of public school

View about mathematics: neutral

Character: shy

Report by: Anel Mengdigali

Location: Kazakhstan, Almaty, Zhumabayeva street 106, 37.

Date: April 3, 2020

Session Start Time: 18:20

Session End Time: 19:05

Lesson: https://www.oppia.org/explore/umPkwp0L1M0-?collection_id=4UgTQUc1tala

Note 1

She very liked such explanations of the topic, and napkin illustrations were very suitable for her. However, after the lesson she said that it would be nice if the lesson has a video tutorial. I want to suggest adding alternative choices for learning such as video tutorials.

Note 2

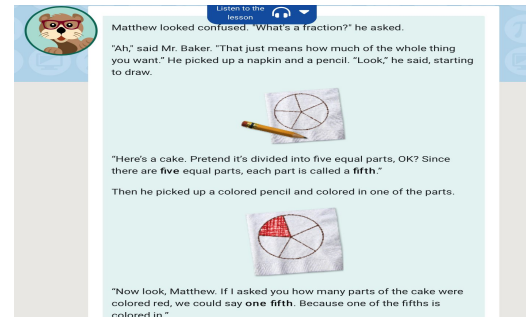
She was somewhat disappointed with those questions with typing answers, and she could not write her answer in a word typed way. But I admit that there was an instruction for writing in a slash way in the answer typing slot. I asked about these questions after the lesson, and she said that multiple-choice questions were better for her. I offer to change the system for such open questions for being able to write in both ways, namely numeric and word. Another option is to adjust all questions for more multiple-choice type questions. However, I assume that open questions are also good for keeping up with the new topic.

Note 3

She noted such system error ([Math Processing Error]). I guess it was due to the server since for the student #1, I did not remember such a case. Additionally, she spent a sufficient amount of time on this page, I thought she was overwhelmed by the remarkable chunk of information. However, after the lesson she said that the first part of the explanation was unclear for her as she did not understand what does type means in this context.

General Notes


She said that readers' (audio record) intonation and encouraging words were helpful for her to get the right answers after she got mistakes. Additionally, she most liked going back to the learned information if needed, and relearning if she has shown not well results. She also wanted to continue with this fractions topic further, so I also provided links to the other two topics, as she very liked learning mathematics in this way. I can confidently say that her view about mathematics was changed towards the good side.



Listen to the lesson


Matthew looked confused. "What's a fraction?" he asked.

"Ah," said Mr. Baker. "That just means how much of the whole thing you want." He picked up a napkin and a pencil. "Look," he said, starting to draw.

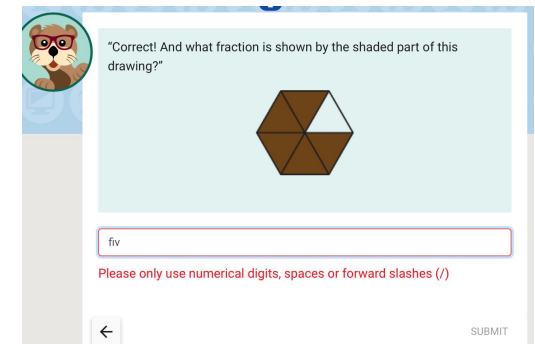


"Here's a cake. Pretend it's divided into five equal parts, OK? Since there are five equal parts, each part is called a **fifth**."


Then he picked up a colored pencil and colored in one of the parts.



"Now look, Matthew. If I asked you how many parts of the cake were colored red, we could say **one fifth**. Because one of the fifths is colored in."



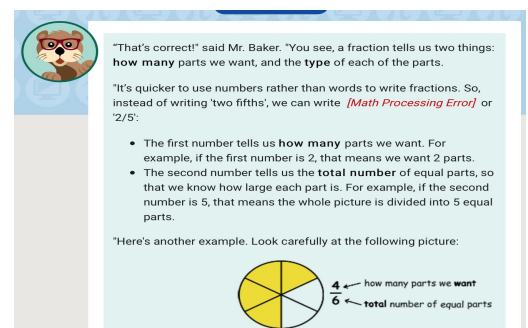
"Correct! And what fraction is shown by the shaded part of this drawing?"



five

Please only use numerical digits, spaces or forward slashes (/)

← SUBMIT




"That's correct!" said Mr. Baker. "You see, a fraction tells us two things: **how many** parts we want, and the **type** of each of the parts.

"It's quicker to use numbers rather than words to write fractions. So, instead of writing 'two fifths', we can write **[Math Processing Error]** or **2/5**."

- The first number tells us **how many** parts we want. For example, if the first number is 2, that means we want 2 parts.
- The second number tells us the **total number** of equal parts, so that we know how large each part is. For example, if the second number is 5, that means the whole picture is divided into 5 equal parts.

"Here's another example. Look carefully at the following picture:



$\frac{4}{6}$ ← how many parts we want
← total number of equal parts