*Special thanks to the participating teachers of the Book Club meeting for sharing their ideas with us.* 😊

Fractions in Disguise by Edward Einhorn

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| **PRE-READING TASKS**💡 Ask students to prepare a mini presentation to share their personality and interest.Q1: Describe your personality using fractions. Use the following diagram to help you.

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| Adjective | Fraction |
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Different objectives could be achieved:* comparing fractions
* expanding fractions by folding the diagram
* adding fractions to make a whole
* reading fractions correctly 📚*MATH+ENGLISH*
* adjectives to describe personality traits 📚*ENGLISH*
* comparative and superlative of adjectives 📚*ENGLISH*

Q2: Are you a collector? What do you collect? How long have you been collection them? Where do you put them? Try to use fractions when you answer some of these questions.(Purpose: allow students to relate fractions to their daily life)💡 Pose question while reading the book title:Q: What does ‘disguise’ mean? 📚*ENGLISH* |

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|  | **TEACHING IDEAS (P.3)**💡 Turn the “fraction” display into realia for demonstration of fractions in class.💡 Ask students to use other representations (e.g. number lines, Cuisenaire-rods, drawings) to present and compare fractions.💡 Pose questions while reading this page:Example 1Mr. Factor has a wide collection of fractions. What are the fractions that he actually has? Represent the fractions using drawings or other manipulatives according to the story/teacher’s instruction. Are there any equivalent fractions?Example 2First shelf: (a) (b) (c) (d)Second shelf: (e) (f) (g)Third shelf: (h) (i)Q1: Why are the fractions (h) and (i) put on the third shelf? Are they the same/different? (Hints: reduce the fraction)Q2: Are the fractions on the second shelf the same/different?Q3: If all the fractions are the same/different on each shelf, is fraction (a) put in the right place?Q4: Which fractions are the same/different? How are they the same/different?💡 Students work in pairs to finish Mr. Factor’s profile (e.g. his interests, characteristics). 📚*ENGLISH*💡 Challenge the students if ‘it all adds up to one thing’ through colouring some boxes (without introducing addition of fractions). 📚*MATH+ENGLISH*💡 Use other representations such as number lines to illustrate the idea of ‘2/3 of my life’ (without introducing multiplication of fractions). |

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|  | **TEACHING IDEAS (P.4)**💡 Model an auction and play with students.💡 Pose questions while reading this page:Q1: Compare the three fractions using different representations.Q2: What is 1/2 of a million dollars?Q3: What does ‘approaching one million dollars’ mean?Q4: Can the three characters ever reach one million dollars? |
|  | **TEAHCING IDEA (P.6)**💡 Pose question while reading this page:Q: What does ‘there’s a foul play afoot’ mean? 📚*ENGLISH* |
|  | **TEACHING IDEA (P.8)**💡 Ask students to write number sentences while reading this page. |
|  | **TEACHING IDEAS (P.12)**💡 Ask students to translate the text to number sentences.💡 Design a worksheet including the following questions.Q1: Design your Reducer. List out the components using fractions. 📚*MATH+ENGLISH+ART*Q2: Write your own problems about equivalent fractions. Exchange your problems with a peer and ask him/her to solve the problems. Then check your peer’s answers using your own reducer. |
| **EXTENSION**💡 Design a worksheet including the following questions.Q1: Design your own Expander. List out the components using fractions and explain the function of your Expander.Q2: Re-write the story (or part of the story) with your Expander. 📚*MATH+ENGLISH***TIPS***Culture is another significant element in a storytelling piece. While students re-write the story, instead of using the names from the original text such as Baron von Mathematik, Madame de Geometrique,* ***encourage students to play around the names of the characters with reference to their own culture.****One cannot separate the culture from the text. (Bharucha, 1993:70)* |