Mathematics Fourth Grade Quarter II: Finding Solutions

Revision (12:51pm October 30th)

**IM1.**

**Writes number sentences using fractions and mixed numbers to identify pertinent information from word problems about adding, subtracting, multiplying, and dividing mixed, proper and improper fractions.**

Excelente: Shows and explains why the number sentence written is correctly formulated for solving the problem by showing and explaining how he organized the pertinent information from the word problem

Sobresaliente: Formulates the correct number sentence for the word problem and explicitly shows the pertinent information used to write the number sentence

Bueno: Writes the correct number sentence by using only the pertinent information to solve the word problem

Insuficiente: Formulates an incorrect number sentence and does not recognize the pertinent information from the word problem

Deficiente: Displays no understanding to formulate a number sentence based on the information in the word problem

**IM2.**

**Orders and compares proper, improper, and mixed fractions and mixed numbers to calculate equivalent fractions and finding their simplest form.**

Excelente: Solves the problem, shows all his steps in his calculations, is organized, and explains the process in his calculations

Sobresaliente: Solves the problem, shows all his steps in his calculations in a clear and organized way

Bueno: Solves the problem and shows the steps in his calculations

Insuficiente: Solves the problem accurately, but does not show all his calculations or steps

Deficiente: Incorrectly solves the problem and does not show calculations or steps.

**CT1.**

**Solves word problems based on proper, improper, and mixed fractions to appropriately choose operation(s) and step(s) for either adding, subtracting, multiplying, or dividing fractions.**

Excelente: Shows his work accurately and explains why the operation(s) and the step(s) are the best for the solving the problem, and verifies his work

Sobresaliente: Solves the problem by using the appropriate operation(s) and step(s)

Bueno: Identifies the appropriate operations(s) and step(s) to solve the problem

Insuficiente: Uses an incorrect operation(s) and step(s) to solve the problem

Deficiente: Does not use any operation or step to solve the problem

**CT2.**

**Describes his mathematical thinking about proper, improper and mixed fractions to defend his answer(s) about word problems by outlining his process for either adding, subtracting, multiplying, or dividing fractions.**

Excelente: Proposes a unique way to argue his thinking about his answer and explains his procedure clearly to others, if the answer is incorrect, he makes the necessary corrections, explains his error and autonomously devises a plan not to repeat the same error

Sobresaliente: Shows he defends his answer and explains why his calculations are correct, and if incorrect, makes the necessary corrections and explains his error

Bueno: Verifies his solution to the problem accurately by using the opposite operation or another method, and if incorrect, makes the necessary corrections and verifies again

Insuficiente: Incorrectly verifies his solution to the problem

Deficiente: Shows no verification

**CR1.**

**Creates words problems to connect the human body by writing problems consisting of adding, subtracting, multiply, and dividing proper, improper and mixed fractions**

Excelente: Makes multiple-step problems that include the human body as the basis for writing word problems and solves the problem accurately

Sobresaliente: Creates two-step word problems that include the human body as the basis for writing word problems and solves correctly

Bueno: Generates one-step word problems that include the human body as the basis for writing word problems and solves

Insuficiente: Makes word problems considering the human body as the basis for writing word problems and solves incorrectly

Deficiente: Word problems are incoherent and do not consider the human body as the basis for writing word problems

**CR2.**

**Applies real world use of proper, improper, and mixed fractions to create graphs, probability problems, and use of volume with surface area**

Excelente: Shows more than two different ways to apply real world use of proper, improper, and mixed fractions and explains

Sobresaliente: Shows two different ways to apply real world use of proper, improper, and mixed fractions and explains

Bueno: Shows one way to apply real world use of proper, improper, and mixed fractions

Insuficiente: Incorrectly applies real world use of proper, improper, and mixed fractions

Deficiente: Does not attempt to apply real world use of proper, improper, and mixed fractions

**MC1.**

**Makes a plan of action using strategies to consolidate concepts related to proper, improper, and mixed fraction, calculating simplest form, finding volume and surface area, and graphs and probability.**

Excelente: Consolidates math concepts by making his own plan to autonomously study and to teach others the math concepts as a study strategy

Sobresaliente: Shares his plan of action to improve on his math skills and works in collaboration with peers to practice skills as a study strategy

Bueno: Makes a plan to study by using strategies given by the teacher

Insuficiente: Studies without a plan and only studies for evaluations

Deficiente: Math concepts are not consolidated and study strategies are not practiced

**MC2.**

**Monitors and reflects on his progress to make any necessary adjustments to his learning and consolidation of concepts**

Excelente: Autonomously and continuously monitors his progress and reflects on his skills, if necessary makes adjustments and strengthens study strategies throughout the quarter and shares his strategy with others

Sobresaliente: Regularly verifies his own learning of the concepts and adjusts his study habits by practicing his skills and reviewing the concepts with the teacher, a peer, or his parent

Bueno: When reminded, he stops, checks and reflects on his understanding of concepts and asks for assistance from a teacher, peer or parent

Insuficiente: Checks his progress by only looking at his evaluations and makes no adjustments to his study habits

Deficiente: Shows no reflection on his learning and no adjustments are made throughout the term

Evaluations Math Term II

Week 1 Math (IM2 Order and Compare Fractions)

Week 2 Expedition Colombia: Los Llanos

Week 3 Math (CR2 Blood Type Lab)

Week 4 Math (Practice with Fractions) (Christmas Show)

Week 5 Math (Continued Practiced with Fractions, Review return from Christmas Break)

Week 6 Math (IM1, CT1, CT2, MC1, MC2 Summative Fractions Quiz)

Week 7 Math (40% Cut) (CR1 Creates Word Problems: Unit Project)

Week 8 Math (CR2 Biochemistry Lab: Unit Project)

Week 9 Math (Continued Practice with Fractions and Formative Assessment)

Week 10 Math (Continued Practice with Fractions based on the analysis of the Formative Assessment)

Week 11 Math ((IM1, IM2, CT1, CT2, MC1, MC2 Summative Fractions Quiz #2: Unit Project)

Week 12 Math (80% Cut and Review of topics before Term Evaluation)

Week 13 Math (Term Evaluation)

In Math, students will writing problems related to the topics learned in class about fractions to use as questions for their board game. The math questions written will be used as study tools for the quizzes and evaluations conducted during the term and specifically as a study tool for the final term evaluation. Students will take notes on the topics, practice using drills, apply knowledge to the human body context in science, use model problems to design their own problems, use study strategies to enhance skills in fractions, keep a learning diary in their agendas, and use self-evaluation tools.

Evaluations Science Term II

Week 1 Science (Circulatory System) (Introduction to Graphic Organizer)

Week 2 Science (Expedition Colombia: Los Llanos)

Week 3 Science (Lymphatic System) (Immunology Lab)

Week 4 Science (Skeletal System) (IM1 Graphic Organizer) (IM2 Graphic Organizer Component and Functions Explanation) (MC1, MC2 My Learning Process)

Week 5 Science (Muscular System) (Back from Christmas Break: Review of topics covered)

Week 6 Science (CR1, CR2 Analogies) (CT1 Diagnosis) (CT2 Compare and Contrast)

Week 7 Science (40% Cut) (Digestive System) (Biochemistry Lab)

Week 8 Science (Excretory System) (IM1 and IM2 Graphic Organizer II)

Week 9 Science (Histology Lab)

Week 10 Science (Nervous System) (CR1, CR2 Analogies II)

Week 11 Science (Endocrine System) (MC1, MC2 My Learning) (CT1 Diagnosis II) (CT2 Compare and Contrast II)

Week 12 Science (80% Cut) (Cells in Action Lab) (Review of all topics)

Week 13 Science Term Evaluation

In Science, students will use human body systems as the basis for designing their board game. Students will write questions, create analogies, formulate diagnosing scenarios, provide remedies or solutions for patients in a given scenario, take notes, fill-in graphic organizers, use iPad applications, research information using school tools, use study strategies, self-evaluate, and use the board as a study tool for quizzes and evaluations. During the term, each student will become expert medical students in three system of their choosing and create a multimedia presentation for the end of the term.

Within the project where students will create a game combing the subjects area, the students will be developing all the competences in the following ways: Development of the game including the game board, game pieces, and game rules to promote MC1 and MC2 by planning long term project; and with CR1 and CR2 by transferring the information to new context for other to play their game. The development of the questions for the game in all three or more subjects will entice the students to use IM1 and IM2 to organize their information; and CT1 and CT2 to promote higher order thinking questions throughout the term.

My planning process consists of providing students the best practices in literature, math and science. I try to utilize different dynamic and interconnected teaching approaches by using resources like iPad apps, computers webpages, experts in the field, drills, memorization games, labs, field trips, and flipped learning.

My didactic approach tries to encompass various subject areas to make significant connections, so students are able to retain information longer. I see each student as a whole child, not strictly academic, but with the intention of helping student make healthy decision socially, emotionally, and academically.

I am constantly giving students direct written feedback on all evaluations and giving students the opportunity to use the feedback immediately by allowing students the time and tools to make corrections. Also, I provide feedback as a whole class to students after doing an analysis of errors and sharing the information with suggestions for improvement.

My disposition is always willing to improve my skills in teaching and use all the resources provided by the school. My attitude is open to new and creative ideas and applying them in the classroom.

Week 1 Math: Total 3 hours

1 hour-Objective: Introduction to fractions, types of fractions, fraction vocabulary, review of fractions, conversion among fractions, explicit concepts about fractions (working towards IM2)

\*Review indicator IM2 with students and MC2. Students will be graded on IM2 this week, but remind students that they will be able to use their notebooks. MC2 will be important all term, so they should be aware of this indicator for the rest of the term.

\*students will be given key vocabulary, notes and other materials to glue in their notebooks as resources to be used throughout the term.

\*teacher will explain each copy and add notes when necessary

\*materials will be on your desk by Tuesday morning and we will discuss the material at 10:15 on Tuesday

\*Share with the students the student weebly page and show students the weekly homework under section Term II in Math. The answers will be provided when appropriate, but remind students that homework is for practice and to review topics. It is up to them to use the resources appropriately.

\*If there is time left, students will play a quick comparing game using cards that show fractions. It is necessary for students to say the fraction and use the following vocabulary to earn the cards (one half is bigger or larger than one tenth or vice versa one tenth is smaller or less than one half)

1hour-Objective: examples on how to compare and order fractions (working towards IM2)

\*review indicator IM2 with students, explain the importance of showing their work and explaining the steps

\*student will receive examples of problems and students will practice with the teacher and then in pairs.

\*students will show their work and explain their steps, similar to the examples given at the beginning of this class

\*use page 64 of the student workbook to practice with students. Project the page on the board and with the students fill in the information.

\*Each problem do the following: #1-show how eighths is smaller than sevenths, #2-use chart Equivalent Fractions, #3-use the Visual Fractions Chart, #4-use the Visual Fractions Chart, #5-Use the Visual Fractions Chart, #6-show how eighths are smaller than fifths

\*#7-divide the line into 8 pieces from 0-1 and show students how to put the fractions on the line, #8-circle 5 10/11 and explain that this fraction is the greatest, but we will practice using the other three fractions-divide the line into 12 pieces from 4-5-then place the fractions in order, #9- divide the line into 14 pieces and label from 1-2. Have the student try this problem. (\*the game will be available on the weebly page Term II Math for more practice as homework)

\*#10-change the fraction into a decimal and #11-divide the line into 16 pieces and place the fractions on the line, #11-discuss how the denominator determines the size of the pieces, #12-draw each fraction as a circle 1/6, 1/5, 1/4, 1/2

\*#13 allow students to decide how to solve this problem in pairs, then discuss whole group

\*http://www.trox5.com/interactive/games/hatchin.html Use this game to show students how to use a number line and see how it is possible to divide the line into several more pieces or less piece without changing the size of the number line

\*the game will be available on the weebly page Term II Math

1hour-Objective: Practice problems with scaffolded quiz for IM2

\*students will take a quiz that will be scaffolded with the teacher.

\*students will do one problem with the teacher, then a problem in pairs, and then one or two problems individually

\*the individual problems will be graded for (IM2-Order and Compare Fractions)

\*this will be explained during the meeting on Tuesday at 10:15, but the activities are similar to the ones that were done in the previous class

\*at the end of class, have students write 3 questions like the ones worked on during the quiz to incorporate into their game with the answer written on the card, student should label the card MATH

<http://mrnickisch.weebly.com/uploads/5/1/0/3/5103507/edm_games.pdf> Game cards fraction Top It Master Copies pages 22-23

Week 1 Science: Total 2 hours

2 hours-Objective: Students will be introduced to the graphic organizer that will be used during the term and the indicators for this term will be reviewed (working towards IM1, IM2 and MC1, MC2 with an introduction to CR1, CR2)

\*show a PowerPoint presentation to students related the circulatory system as the introduction the human body

\*within the presentation, students will be given information about how to extract information from text or webpages to fill in the information to a specific graphic organizer for the circulatory system

\*the presentation can be found on the <http://printingplanfourthgrade.weebly.com/> under TERM II Science

\*the completed graphic organizer for the circulatory system will be given to each student to glue in their notebooks, also found on <http://printingplanfourthgrade.weebly.com/>

\*during our meeting at 10:15 on Tuesday each slide of the presentation will be explained

\*Review indicators with students and have the students glue the indicators in their notebooks <http://printingplanfourthgrade.weebly.com/>

\*at the end of class, discuss with students the importance of knowing you blood type. Share with the students your blood type and ask students if they know what their blood type is. Do a quick survey and see if there are students with O+, O-, AB, A or B. If there are students with a varied blood type as them if they would be willing to have one drop of blood used for a demonstration in lab on December 1st. They will need parent permission. The lab will consists on the identification of blood types and the results will be used for math.

\*select six student and two (substitutes) to take permission to draw blood from the students on December 1st in the lab, hopefully you are able to get different blood types in order to make clear comparisons

<http://www.untamedscience.com/biology/human/circulatory-system/> All the systems

<http://gimnasiocampestre4.wordpress.com/>

Week 3 Science: 2 hours

Objective: Students will visit the lab to see how blood types are distinguished using antigens

\*students will take notes based on the information given in the lab

\*please divided your class into 6 groups with one of the students with the permission to extract three drops of blood in each group

\*students must wear their lab jacket, no lab jacket...no lab

\*students must take their notebooks, pencil or pen, or pencil case

\*conclusions will be discussed during math

\*Schedule for the Biology Lab: Monday December 1st ---Lab #1 Blood Types--- 4B: 7:30-9:00am, 4C- 10:15-11:45am, 4A- 12:45-2:05pm

\*have students write one question on an index card with the answer with the label of Science

Week 3 Science: 2 hours

Objective: Students will learn about the lymphatic system and fill in the graphic organizer (working towards IM1, IM2, CT1, CT2, CR1, CR2, MC1, MC2)

\*follow the information of the initial PowerPoint from week 1

\*students will add information to their chart in their notebook using the information from the slides and then verify their information with the last slide

\*review CR1, CR2 and IM1, IM2 with the students

\*next week, they will be filling in the information for the skeletal system using the same graphic organizer and they should be aware about their how they are learning the information about the human body (preparing for IM1, IM2, MC1, and MC2)

\*Have students write two questions about the lymphatic system on index cards with the answer and have them label it Science

\*For homework or in class, have the students write an analogy about lymph and their functions, and one analogy about a malfunction based on their readings from Spanish class

\*please make sure students know their blood type for the upcoming math class

Week 3 Math: 1 hour

Objective: Students will use the lab information about blood types to use fractions with real world application

\*students will receive the blood type chart to glue in their math notebook and the conversion chart

\*discuss with students the importance of knowing their blood when donating and receiving blood under specific circumstances

\*collect your class data by doing a tally on the board using all the blood types. Student should copy the information in their notebooks

\*create a four-column chart with the titles, Blood Type, Fraction, Decimal, and Percentage

\* create fractions for each blood type based on the tallied information

\*show the students the process to convert from Fraction to Decimal then to Percent

\*if possible, see if there are fractions that can be written in their simplest form or reduced

Week 3 Math: 1 hour

Objective: Students will answer questions related to the blood type lab using the information they tallied from the previous class

\*students will create a bar graph showing the information with guidance from the teacher

\*Students will answer the following questions whole group based on each classes’ information

\*Using the charts and the created graph answer these questions in your science notebook.

1.What percentage of students are type O? How many students as a fraction? 2.What percentage of students can receive blood from type O? How many students as a fraction? 3.What is the percentage of students that have A antigen? How many students as a fraction? 4.What is the percentage of students that have A antibody? How many students as a fraction? 5. What is the percentage of students that can donate to AB blood type? How many students as a fraction? 6.Why is important to know your blood type? Explain with examples. 7. What is the total percentage that you could receive blood from in the class? How many students as a fraction?

\*Students will take this information to Elsa’s class and create graphs using Excel. The graphs should be copied into their Math notebooks to be used as a grade at a later point in time.

Week 3 Math: 1 hour

Objective: Students will take a quiz (CR2 Blood Type Lab) based on all of fourth graders’ blood types using the same strategy from the previous two classes

\*please give the information of your grade level’s blood types to each class or include it here in the planning

\*show the information using tallies on the board

\*students will organize the information in the four column-chart exactly the way it was done in the previous class

\*Students will create a bar graph to show the blood types

\*students will answer the same questions using the new information from all fourth grade classrooms

\*Students will write 2 questions on index cards using the chart with fractions, decimals, and percent and label the card Math

Week 3 Math: 1 hour

Objective: Introduction to adding, subtracting, multiplying, and dividing fractions

\*give students the anchor charts to be glued in their notebooks

\*review each chart briefly so students know how to use them

\*the anchor charts can be found on <http://printingplanfourthgrade.weebly.com/> under MATH: Term II

\*this is strictly the operations, next week the reasoning behind each operation will be done in detail

Week 3 Math: 1 hour

Objective: Students will play a fraction game with 7th graders to introduce and practice adding, subtracting, multiplication and division of fractions using the anchor charts and comparing fractions

\*Schedule: Thursday, December 4th 4C-8:50-9:10 am; Friday, December 5th 4B-9:20-9:40 am; December 5th 4A-2:00-2:20 pm

\*Divide your class in half. Half of the class will stay with you and the other half will go to the 7th grade classroom. Students should take their notebooks and pencil

\*4C—half the class goes to room Red 3 (7B)

\*4B---half the class goes to room Red 2 (7C)

\*4A—half the class goes to room Red 4 (7A)

\*students will write 3 questions similar to the ones the 7th graders gave them on index cards labeled Math

Week 4 Math 1 hour

Objective: Students will practice adding, subtracting, and multiplying fractions using the charts with guided practice with the teacher. (Working towards all indicators)

\*use page 71 from the Student Workbook, you do the odd problems with the class using the chart with common denominator, project the page on the board

\*After the teacher does problem, the student will attempt the next problem (they will do the even numbered problems)

\*use page 79 from the Student Workbook, you do the odd problems with the class using the chart with common denominator, project the page on the board

\*After the teacher does problem, the student will attempt the next problem (they will do the even numbered problems)

NOTE: it is not necessary to simplify at this point, we will go back to the problems next year and simplify all the problems. BUT please convert improper fractions to proper fractions

Week 4 Science: 2-hours

Objective: Students will complete a graphic organizer using information from various resources about the Skeletal System to be graded for IM1, IM2, MC1 and MC2

\*students will use the iPads to gather information (make sure you ordered the iPads for 2 hours)

\*students will follow the instructions given on the weebly page under SCIENCE, TERM II: Week 4 IN CLASS ACTIVITY

\*Components and Functions will be graded for IM1 and IM2

\*MC2 and MC1 will be graded with the questions provided on the weebly page

Week 5 Science

1 hour: Objective: Students will complete the graphic organizer for the muscular system

\*use the PowerPoint provided to complete the graphic organizer…weebly printing page under Science Week 5

\*explain to students that part of the graphic organizer has been done, but the remaining parts will be done in class using various resources

\*Please show the first minute and 27 seconds (1:27) <http://youtu.be/q5MyCwatq6E> which has information about the functions of the muscular system. There are four things this teacher discusses. The students will listen first, and then take notes based on the information she is sharing with the second viewing of the video. They should interpret the information into their own words. At home, students can do the last viewing

\*Next from the same video, show the next few minutes, up to minute 4:14. Listen to it once, then the second time, have students take notes in the Interactions part of their graphic organizer. Students will have to write about the cardiovascular or circulatory system, digestive system, and skeletal system in this section, based on the types of muscles.

\*briefly discuss the muscular malfunctions with students

\*remind them to add more information in any of the sections to guarantee and an Excellent

\*have students write one or two questions for the answers for the game in reference to the skeletal system

Science: 1 hour: Objective: Students will use information from the muscular system and apply it to physical education class

\*use the second part of the PowerPoint provided to share with students the vocabulary necessary to discuss movements and locations of muscles of the human body

\*have students write 2 questions for the board game about location and movement of the muscles

Week 5 Math 1 hour

Objective: Students will review fraction concepts using the given charts

\*Review all the charts within the student notebooks. The charts are available to project from week 1 on the teacher printing page

\*remind students the charts in their notebooks will be used in this trimester as reference for problems, activities and workshops that will be done in class and sometimes at home.

\*Review the charts by showing how to use each chart:

Visual Fractions Chart---to compare fractions (give the example: 4/5 and 8/16)

Equivalent Fractions---to see if fractions are equal or not (give the example: 4/10 and 2/5)

Converting Improper to Mixed numbers and vice versa---review the operation

Adding and Subtracting Fractions---practice a few problems with like denominators and use improper fractions, then changing to mixed numbers (4/10 + 7/10 = 11/10) (5/6 - 4/6 = 1/6)

Multiplying and Dividing Fractions—emphasize on the reciprocal in division, but the operation is exactly the same

Week 5 Math 1 hour

Objective: Students will learn how to simplify fractions and practice using the GCF

\*Tell students that the GCF will be used to simplify students will take notes about why it is necessary to find the GCF to simplify (notes will be uploaded later)

\*Practice using page 65 from the work book, do a few together and allow students to do some on their own.

\*Do problems #1-9 on page 65

\* Apply GCF to page 66 of the workbook

\*Do problems #1-9

Week 5 Math 1 hour

Objective: Introduce word problems that involve fractions and apply concepts already learned

\*students will work in groups of 3-4 to play a word problem game

\*Each groups will receive 10 problems

\*one student will take a problem. Read it aloud. Each student will answer individually on their paper the following questions (these questions will be provided for the game)

1.What is information not necessary?

What information is not present, but necessary?

\*students will check their answers and get one point if the answer is correct

2. How many steps are necessary to solve the problem?

\*students will check to see how many points they deserve

3.What operation or operations should you perform to solve the problem? Explain.

\*students will check their answers and get one point for a correct answer, three points if the explanation is valid.

3. What steps do I take to solve the problem? (you can use your notebook…operations of fractions)

\*students will check their answers and get one point for a correct answer of the steps. They should not solve the problem

Week 5 Math 1 hour

Objective: Catch-up on any activities from the week before

Week 6 Math

1-hour-Objective: Review topics covered and/or catch-up on any activities from previous weeks

1 hour- Objective: finish the word problem game or do as many problems as possible

\*review indicators CT1 and CT2 and remind students this game will help them prepare to get the highest grade on these indicators

\*students will continue to play the game and earn as many points as possible

1 hour-Objective: students will use the problems from the game to solve for (CT1, CT2 Summative Fractions Quiz)

\*review indicators CT1 and CT2 with students before the quiz

\*teacher has two options for the quiz (1) the teacher selects 3-4 problems for the whole class to solve and projects them on the board or (2) the teacher randomly passes out problems from the game for students to solve, 2-4 problems per students

1-hour Objective: students will be introduce to recipes where fractions are used as measurements

\*follow the PowerPoint provided on the printing page

\*students should take notes based on the presentation

\*as a whole class do a few practice problems based on recipes

\*this will uploaded later this week

1-hour Objective: students will pick a recipe to make for the class and use fractions to reduce the ingredients

\*review MC1, MC2, IM1 from the indicators and tell students the following project will entail grades from the indicators mentioned

\*the recipes will be given for students to choose from

\*students can be in groups of 3 or 4

\*most recipes will require some cooking, but most will be non-cooking recipes

\*during this class, students will calculate the amount of ingredients and caloric value by determining measurements using fractions

\*students will make a plan to prepare for their Fraction Recipe Presentation and actually bring in the food

\*This project will be graded for (MC1, MC2, IM1 Summative Fractions Quiz)

\*these recipes and the checklist for the presentation will be uploaded later this week

Homework:

Students will bring their completed recipe to share with the class and be prepared for their presentations

5 hours- 1 hour for QUIZ (problems from the game)

Week 6 Science

2 hour-Objective: Students will practice creating analogies in groups of 4 about the systems studied with a game that will be played whole class

\*since they will be playing the roles of medical doctors or students, it is important to be able to create analogies in order to explain to patients what is happening in their body

\*follow the instructions from the PowerPoint provided for the game

\*have the students think about the stories they are reading in Spanish and in English to use as examples for analogies (characters, situations, actions, conflict, solutions etc…)

\*At the end of the game, students (individually) will create a final analogy that will be graded for (CR1, CR2 Analogies)

1-hour Objective: students will be presented with a scenario to diagnosis a problem in the human body system

\*all the information will be found on the http://printingplanfourthgrade.weebly.com/

\*introduce the Normal Vital Sign Parameters and have students glue the information in their notebooks

\*students will be presented with a scenario and will use prior information from the systems studied, information in their notebooks, and background knowledge to help the patient feel better

\*one practice scenario will be done with the students

\*the next scenario can be done in pairs or individually and will be graded for (CT1 Diagnosis) (CT2 Compare and Contrast)

1-hour Objective: Students will learn about carbohydrates, proteins, and sugars to prepare for the lab during week 7

\*use your lab time or the computer cart

\*students will enter the weebly page and complete the activities presented for week 6

2 hour- Objective: Students will have practice doing diagnosis and creating analogies for patients using the iPads

\*tell students that it is important to know the normal signs of blood pressure breathing, temperature etc…

\*students can use their notebooks, including the Normal Vital Sign Parameters, and the apps selected during this time

\*students will be given written instructions to complete in their notebooks and will be graded for

Homework or computer lab activity: The activity will uploaded to the student webpage. The homework will prepare students for the lab in week 7 about the digestive system. The homework should be completed in their notebooks.

Week 7 Science

2 hours-Objective: students will participate in a lab to identify proteins, lipids, and phosphorous using reactive chemicals

\*students will need their lab jacket, pencil case, and science notebook

\*students will take notes and follow instructions carefully

\*at the end of the lab, students will write down three main “take-away” ideas about the lab in their notebook (take-away ideas are main points that will be used in life and remembered forever)

\*Monday: 4B-7:30-9:00am, 4C 10:15-11:45, 4A 1:25-2:45

Teacher information: The lab will consists of identifying proteins, lipids, and phosphorus using reactive chemicals. At the molecular level all of these are necessary and valuable nutritional groups for the body. These are the basic molecules for life. We are always told to eat protein and to eat healthy diets, but why. The boys will find out this week.

\*In the lab, please ensure students are taking notes, quietly listening to instructions, and most importantly carefully observing changes or no changes in the lab practice. The students need to be safe and must be QUIETLY listening to instructions. If they are not paying attention, they can ruin the experiment for the other students in the group. There is no room for error. The test can only be performed once. As the changes happen, the students will write a description of the changes.

\* Conclusion: Have students answer this questions in their notebooks. Based on the lab and the video from last week, why is it important to eat protein and have a healthy diet?

2 hours-Objective: students will use medical iPad applications to learn about the human body

\*students will be given instructions to glue in their notebooks

\*students will answer questions, search for information and follow instructions carefully

\*Before beginning the Ipad activity, explain to students the importance of technology in studying the human body, especially when it comes to dissecting animals. “Dissection was one way scientist learned about the body. Most experiments are done on white rats. The rat has many advantages as a research animal. The laboratory rat is readily available, is inexpensive, and easy to house. The genetic uniformity of available strains and stocks makes for reproducible research results. These animals are intelligent, adaptable, and easy to handle. The larger size of rats, compared to mice, makes them a more suitable surgical model. Uses of the rat in research include, but are not limited to, studies of physiology, nephrology, endocrinology, nutrition, metabolism, drug evaluation and toxicology, and transplantable tumors.”

(The iPads are in the process of getting all the apps installed, so once they have been installed they will show up in the SGS system. Once this occurs, we will be able to reserve them for our classroom.)

1-hour Objective: students will be introduce to recipes where fractions are used as measurements

\*follow the PowerPoint provided on the printing page

\*students should take notes based on the presentation

\*as a whole class do a few practice problems based on recipes

\*this will uploaded later this week

1-hour Objective: students will pick a recipe to make for the class and use fractions to reduce the ingredients

\*review MC1, MC2, IM1 from the indicators and tell students the following project will entail grades from the indicators mentioned

\*the recipes will be given for students to choose from

\*students can be in groups of 3 or 4

\*most recipes will require some cooking, but most will be non-cooking recipes

\*during this class, students will calculate the amount of ingredients and caloric value by determining measurements using fractions

\*students will make a plan to prepare for their Fraction Recipe Presentation and actually bring in the food

\*This project will be graded for (MC1, MC2, IM1 Summative Fractions Quiz)

\*these recipes and the checklist for the presentation will be uploaded later this week

1-hour Objective: Student recipe presentations

1.5 hours-Objective: students will practice subtracting and adding fractions with different denominators by finding the LCM

\*review the notes for LCM found on the printing page (<http://printingplanfourthgrade.weebly.com/> ) and have student copy the notes

\*do page 72 #1-12 for practice

\*do page 73 #1-12 for applied practice of LCM

\*any problems that require simplification, show students the difference between GCF and LCM by helping the whole class with a few problems

\*Practice problems will uploaded on the weebly page for in class practice or homework, MATH-TERM II- WEEK 7 <http://gcfourthgrade.weebly.com/>

0.5 hours- Objective: students will be introduced to finding the GCF using prime factorization

\*students will be given notes to glue in their notebooks.

\*use problems form page 65, #6, #9 as examples

\*practice problems will be posted on the weebly page MATH-TERM II-WEEK 7for in-class practice or homework

Week 8 Science

1-hour Objective: A guest cardiovascular specialist will present information to students on Friday

\*Auditorium 7:15-8:00

\*students will take notes in their science notebooks

\*during group direction, students will write a thank you letter mentioning three important concepts they learned during the presentation and include one question

1-hours Objective: students will use the iPads to complete the information for the digestive and excretory system in a graphic organizer

\*students will follow a prescriptive guide and search for information about the digestive and excretory system using apps and search engines

2-hours Objective: Students will do a Jigsaw activity about the excretory system from various readings

\*have students review IM1 and IM2 and explain that this time they will create an organized poster about the new information about the excretory system

\*explain that there will be specific criteria that must be included in the poster

\*students will work in pairs, summarize the information from a selected reading about the excretory system, and create a poster

\*students will use the summary, interesting facts, other key information and an analogy explaining something found in the reading to create a small poster (IM1 and IM2 Graphic Organizer II) Tell them to always refer back to the indicators IM1 and IM2

\*Two options for sharing information: the posters can be pasted around the classroom to create walking gallery about the excretory system and students take notes in their notebook about the information OR each group presents the information individually to the whole class, while the class takes notes

Math Week 8

2-hour Objective: Students will create word problems using information about the human body and model problems to guide the process

\*Review Indicator CR1 and tell students they will be creating words problems for their game based on facts about the human body

\*the teacher will tape the Human Body Math Facts around the classroom, or have the students work in small groups

\*pass out the Fraction Game that was used in Week 5 and 6 or tape problems close to the Human Body Math Fact

\*students will use the examples from the game to write their own problems based on the information

\*Some facts cannot be used to write problems, so tell students to be careful when selecting their information

\*remind them to use fractions on their problems

\*Ask students to briefly discuss their word problems with a partner. Verify it makes sense and it can be solved

\*have students select two or three of their best word problems to be graded by the teacher for (CR1 Creates Word Problems)

2-hours Objective: Students will practice drills about adding, subtracting, multiplying, and dividing fractions

\*students will receive a packet of fraction drills to practice

\*do two problems whole class and then allow students work individually

\*students can self-check their work with the answers as they finish or the teacher can share the answers whole class

\*have students make corrections in different colors and explain their errors

1-hour Objective: review any topics necessary with students from previous weeks

\*use this time to review any topics that need further explanation

Week 9 Science

2 hours-Objective: Students will visit the lab and learn about the importance of histology

\* Student will complete a lab in their notebooks, answer some guided questions about pathologies. Student will be comparing healthy and unhealthy cells using microscopes, and they will be able to explain reasons for each disease and provide hypotheses for prevention.

\*Students will need their lab jacket, notebook and pencil cases for the lab

\*students will take notes about the healthy slides and compare to the pictures of slides provided about unhealthy cells

\*at the end of the lab, students will answer questions provided in a handout

\*Biology Lab Times: 4B -7:30-9:00, 4C- 10:15-11:45, 4A 12:45-1:25

1 hour-Objective: Students will write questions for their board game based on answers that can be found in their notebooks

\*students will write questions based on information they have in their notebooks, in other words, future players should be able to find the answers in their notebooks

\*Questions can include multiple choice, true-or-false, and other questions related to the human body systems

1 hour-Objective: Students will review their questions in small groups and check for grammar, appropriateness, coherence and level of difficulty

\*students will share their questions and make corrections in a different color

\*students will use the following phrase to give others suggestions in positive ways (just some ideas to share with students)

-It might sound better if you…

-You can make the question harder, if you add…

-You are missing a word right here…

-You can make the question clearer, if you change…

-I think something is wrong with the grammar, let’s check it again together.

\*after all the students have shared, students will make new game cards with the corrections

\*of there are questions they want to borrow from another student, now is their chance to make new questions

Week 9 Math

1 hour-Objective: Students will watch a brief presentation on how to use fractions, decimals and percentages to show their nutritional habits

\*the teacher will show students a presentation and explain a step-by-step guide for creating a Nutritional Chart for their eating habits

2 hours-Objective: Students will create a Nutritional Facts chart about their diet (CR2 Biochemistry Lab)

\*Please ask for the computer cart for 2 hours this week

\*students will follow the directions on the Math weebly page

\*students will need scratch paper, small poster paper for their final chart, and their notebooks

\*this assignment will be graded for (CR2 Biochemistry)

1 hour-Objective: Students will use the drills from last week to write operational problems from for their board game and questions where the answers can be found in their notebooks

\*students will write new problems similar to those found on the drills from last week and solve the problem

\*answers should be written on the game card

\*students can include problems of comparison, put in order from least to greatest, adding, subtracting, multiplying, dividing, conversion from improper to mixed etc.

\*other examples can include, how do you find the GCF of # and #, or why do you need to find the LCM when adding fractions with different denominators?

\*students can also use their Nutritional Chart to write problems for their board game

1 hour-Objective: Catch-up on activities from previous weeks or review topics where students are struggling or need extra support

Week 10 Science

\*\*\*A minor change will be made to the evaluation chronogram, instead of the nervous system this week, we will be learning about the endocrine system. The grades will be the same for CR1 and CR2, but the name will be—Endocrine System.

2 hours-Objective: Students will learn about the endocrine system using a specific reading.

\*review indicator CR1 with students

\*please order the computer cart for 4 hours this week

\*students will be given a handout to match the components of the endocrine system with the corresponding function

\*students will open a file under Week 10, Science on the Weebly page and use the information to complete the handout

\*have students glue the handout in their notebook

\*students will choose 6 of the 10 components of the Endocrine system and create analogies about the functions from readings in their English and Spanish classes

\*One grade will be given for CR1 (Analogies II) based on the analogies written by the students

\*have students share their analogies to make sure they make sense and make adjustments if necessary

2 hour-Objective: Students will research malfunctions of the endocrine system and help pretend patients to feel about their disorder

\*Review indicator CR2

\*students will initially research some endocrine disorders on the Britannica School Edition by following instruction found on the Weebly page under Science, Week 10

\*Tell students to pretend they will be treating a patient that have the disorders they choose to further investigate

\*From the disorders the students find on the Britannica School Edition the students can use [www.kidrex.org](http://www.kidrex.org) to further research disorders

\*students should know about the disorder, its’ symptoms, and treatments to help their patient for a grade for CR2 (Endocrine System)

\*students should create two scenario similar to the quiz during week 6 and answer the same questions

<http://www.endocrineweb.com/conditions>

Week 10 Math

Week Objective: Students will be introduced to surface area and will practice fractional operations using measurements to calculate surface area of specific shapes

1-hour Objective: surface are of the cube

\*show the students the cube presentation and have them take notes

\*students will practice using fractions to calculate the surface area of a cube using a worksheet

1-hour Objective: surface area of a rectangular prism

\*show students the presentation and have them take notes

\*students will practice using fractions to calculate the surface area of a rectangular prism using a worksheet

1-hour Objective: surface area of a sphere

\*show students the presentation and have them take notes

\*students will practice using fractions to calculate the surface area of a pyramid using a worksheet

1-hour Objective: surface area of a cylinder

\*show students the presentation and have them take notes

\*students will practice using fractions to calculate the surface area of a cylinder using a worksheet

1-hour Objective: surface area of a cone

\*show students the presentation and have them take notes

\*students will practice using fractions to calculate the surface area of a cone using a worksheet

http://youtu.be/oR1ukNC1pvA

<http://www.homeschoolmath.net/worksheets/volume_surface_area.php>

Week 11 Math

Objective: Students will take information from current events, graphs, articles, and other resources to apply fractions, percentages, and decimals to real contexts related to the human body, as well as be graded for IM1, IM2, CT1, CT2, MC1 and MC2

1-hour Objective: review of surface area and operations necessary to calculate surface using fractions

\*review the worksheets from last week and remind students the importance of writing a proper number sentence by using the formula before solving the problem

2-hour Objective: review of surface area, apply surface area to real life, and be graded on various indicators

\*students will work on word problems related to surface area and the human body

\*this activity will be graded for IM1, IM2, CT1, CT2, MC1, MC2 (Summative Quiz II)

2-hour Objective: Students will visit the library and work from magazines, books, and encyclopedias and search for information related to fractions and the human body

\*before going to the library, explain to students that they will be looking for information about percentages, fractions, and decimals related to the human body; in their notebooks, they will take notes and explain what the percentage, decimal, or fraction is trying to explain to the reader. If necessary, students can create graphs to explain the use of the numbers, use a diagram, words, use questions, etc…

\*reserve the primary library section of the library

\*students will take their notebooks and their pencil case

\*books, magazines, and articles will be ready for students to use at each table and be passed out by the teacher

\*students can trade information when finished with the resource they have been using

\*students will take notes about percentages, decimals and fraction information they find in the resources, but they must explain what the author is trying to explain with those number

\*at minimum the students should find two percentages, two fractions, and two decimals

\*remind student that usually fractions are used in word form, for example 2/3 will read two thirds of BLANK, or a quarter of the BLANK, or half of BLANK

Week 11 Science

Objective: Students will use an iPad application to compare and contrast body systems related to medical scenarios to be graded for CT1, CT2 and complete a graphic organizer about the Nervous System to be graded for MC1 and MC2

2 hours- Objective: Students will use the Clinical Sense application to compare and contrast systems involved in the specific scenarios

\*students will follow instructions provided to be glued in their notebooks

\*this will be graded for (CT1 Diagnosis II) (CT2 Compare and Contrast II)

2 hours- Objective: Students will use iPad apps and other resources to complete a graphic organizer about the nervous system

\*students will complete the components, functions, interactions, and malfunctions about the nervous system in their notebooks

\*students should use Build-a-Body to complete the functions and components section of the Nervous System

\*students should use [www.kidrex.org](http://www.kidrex.org) and the School Edition Britannica to research about the interactions and disorders of the nervous system

\*remind students to use their own words to complete their graphic organizer

\*they can use the other graphic organizers used this term to guide them

\*After students have completed the graphic organizer, students will answer questions about their learning process while individually studying the nervous system for MC1 and MC2 (My Learning)

Week 12 Math

Objective: Review topics by playing students’ board games, reviewing the study guide, creating a note card to be used on the final evaluation

1-hour Objective: The teacher will review the study guide with students and prepare them for the final evaluation

\*each point of the study guide should be discussed with students by showing students what they need to know using their notebooks or the resources on the weebly page

\*students can take notes and review materials they have collected in their notebooks

\* during this time students can create a handwritten study card to use for the final evaluation, for example on their card they can include converting improper to mixed, converting a fraction to a decimal etc.(this card with math notes can be used on the evaluation, but it must be handwritten and organized)

2-hours Objective: Using the study guide, students will design questions for their board game that will help them to study for the evaluation

\*students will access the study guide via weebly or the teacher will provide the study guide for students

\*students will create questions and write the answers on the game cards

\*students can exchange cards and make sure the problems make sense and the answers are correct

\*during this time, students can discuss in pairs or in groups of three what information they included on their note cards for the evaluation and verify their information is correct

1-hour Objective: Students will work on their game board and incorporate objectives and rules

\*students will make sure to have all the components of the game including rules and objectives that are clear for all players

\*students can play their games with their peers to check to make sure their game makes sense

\*students can make changes and adjustments to their game

1-hour Objective: Catch-up or review any topics the students need extra support, or use this time for general questions, or this hour can be used to play the games with students from a different grade level

Week 12 Science

Objective: Students will participate in a lab related to cyclosis and make connections between cyclosis, the digestive system, and excretory system

2-hours Objective: Students will visit the lab to explore a cell in action

\*Mr. Pulido will provide information with a few slides and a few videos (please arrive on time, or as quickly as possible)

\*Students should take notes and be prepared to slice the elodea plant

\*They will see an elodea plant cell stimulated through photosynthesis to show cyclosis. Basically, students should be able to see the cell transporting food, and technically, this simple demonstration shows what happens in all organisms and “how nutrients travel throughout the body”. They should be able to see how the cell transports and makes foods (in essence for plants), but the information can be transferred to cells and the body in general. A healthy functioning cell provides for a healthy system. Therefore, it is important to provide healthy nutrients for the all the cells in the body.

\*Students should take notes from observations, copy what they observe with details, and describe the process and actions they can see in the elodea plant

1-hour-Objective: Students will conclude the human body system unit by watching a video about the cells and relating the video with what they have learned in the term

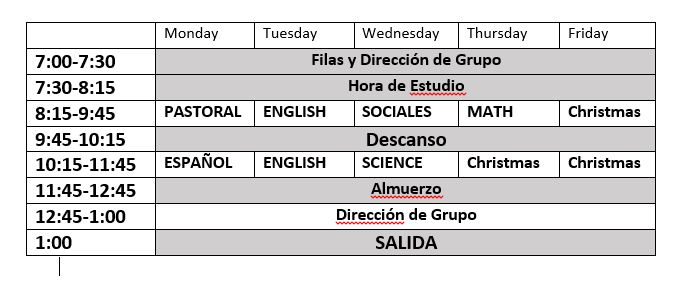
\*on the weebly page students will find the instructions, questions and the video to complete the unit of the body systems

1-hour Objective: Review the science study guide

\*the study guide will be provided on the weebly page

\*project the study guide and answer any questions students might have

\*during this time, have students write the last questions for their game using the study guide to inspire their questions



Math Study Guide

\*add, subtract, multiply, and divide fractions (proper, mixed, and improper fractions)

\*simplify or reduce fractions

\*convert fractions to decimals and percentages

\*compare and order fractions

\*use the appropriate formulas to find the surface area of a cube, a rectangular prism, a sphere, and a cylinder (the dimensions will be fractions and remember to use pi as a fraction)

\*explain how to reduce an ingredient in a recipe

\*write two word problems using fractions related to the human body

Science Study Guide

\*be able to create a graphic organizer with the components, functions, interactions, and malfunctions from a given reading

\*create analogies about functions, malfunctions, and interactions from a given body system

\*

WEEBLY PAGE WEEK 12

Watch the following video.

<http://youtu.be/gFuEo2ccTPA>

Answer the following questions.

1. After watching the video, how do you feel about your body?
2. What questions do you have about cells?

Watch the video.

<http://youtu.be/u54bRpbSOgs>

Answer the following questions.

1. What are made of cells?
2. How is a cell a factory?
3. What protects the cell?
4. What moves inside and outside the cell?
5. What makes the heart pump?
6. What is mitosis?
7. Why do cells perform mitosis?

In your notebook, answer the following question and use examples in your notebook.

1. Why is it important to take of yourself?
2. How do you take care of yourself?
3. Which human body system do you think is the most important? Why?
4. What human body system is not necessary? Why?
5. What body systems does Mr. Smith/Broxholm need to survive on his planet? Explain
6. Draw the alien!
7. Would you like to be alien? Why?

Please tell students they will be preparing a slide with the elodea plant and will be able to see how light stimulates photosynthesis (transport and making of food in a plant cell). Please show students the following short video and tell them to focus on the transportation of nutrients in a cell. <http://youtu.be/u54bRpbSOgs>

Students will watch a brief video to prepare them for CYCLOSIS. The goal in the lab will be to see this in action, but they must follow the instructions in the lab carefully.

<http://www.youtube.com/watch?v=PFtzs_cUddI&feature=share&list=PL1E591143AD487F24&index=1>

\*

<http://youtu.be/b6_SuhG_VPM>

Week 10 English Quiz

Dear Students,

You will create a timeline with 4 main events about chapters 1-12. You will be graded on CT2 and make sure to include the information below in the description section. Be very clear in your writing.

Each event must include the following information.

* What is the event?
* Why the event is important?
* What secondary events support the main event?
* Is it part of the conflict?
* What did you learn that you can use in life?
* Include a picture

<http://www.readwritethink.org/files/resources/interactives/timeline_2/>

The last square should include your grade. Grade yourself and explain. CT2 English

Send me your work. Click on FINISH. Then, SEND FINAL.

Copy and paste my email, do not make any mistakes. [lpizarro@campestre.edu.co](mailto:lpizarro@campestre.edu.co)

After you have sent it to me, SEND FINAL to yourself as well.

Thank you in advance for working diligently.

1. In your Math notebook: Make a list of what you ate yesterday (include drinks and water). Include everything.

Breakfast:

Morning Snack:

Lunch:

Afternoon Snack:

Dinner:

Extra you forgot:

Did you exercise or do a sporty activity? How many minutes?

1. In the chart, organize the types of food and drinks you ate yesterday.
2. Calculate the fraction of the number of servings you ate (numerator) and the recommended daily servings (denominators).
3. Using the fraction calculate the decimal form of the fraction.
4. Based on the decimal, calculate the percentage.
5. Use the percentage form of your original fraction to answer the following questions. Go back to the information about the Biochemistry lab we did about protein, sugars, and lipids (and the video about the ingredients of life).
6. Which food groups did you exceed 100%?
7. Of the food groups you exceeded 100%, which ones do you need to change your diet? Why?
8. Of the food groups you exceed 100%, which ones do you consider it’s OK to have exceeded the recommended servings? Why?
9. Which food groups are less than 100%?
10. Of the food groups you did not reach 100%, explain why it is important to reach 100%?
11. Which food groups did you achieve 100%?
12. Why do you think it is important to reach 100% on a daily basis of each category? Give examples for each.
13. Add all the fractions.
14. When you added all the fractions, what steps did you take?
15. After adding the fractions, does the answer explain anything about your diet?
16. From the chart, what helps you understand your diet better: fractions, decimals, or percentages? Why?
17. Based on your chart and your diet, answer the following questions using the following terms about yourself.

Highly Likely

Likely

Not Likely

1. Developing diabetes, explain
2. Becoming overweight, explain
3. Having healthy heart rate, explain
4. Having kidney stones, explain
5. Having a healthy body weight, explain
6. Having strong and healthy muscles, explain
7. Easily breaking bones if injured, explain
8. Getting colds and/or getting sick often, explain

Practice each game and get better at fractions.

<http://www.mathplayground.com/number_bonds_fractions.html>

<http://www.mathplayground.com/Triplets/Triplets.html>

<http://www.mathplayground.com/ASB_Speedway.html>

<http://www.readwritethink.org/files/resources/interactives/cube_creator/>

English quiz to create cubes! Awesome!!!1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Recommended Daily Servings** | **What did I eat yesterday?** | **Fraction** | **Decimal** | **Percent** |
| Cereal/Carbohydrates  2-servings or 2 cups |  |  |  |  |
| Fruits  3-servings or 3 cups |  |  |  |  |
| Vegetables  3-servings or 3 cups |  |  |  |  |
| Protein  6-servings or 6 oz. |  |  |  |  |
| Water  8-cups |  |  |  |  |
| Sports or exercise  60-minutes |  |  |  |  |
| Soda  1-servings \*\*\*\* double your servings |  |  |  |  |
| Candy/Sugar  1-servings \*\*\* double your servings |  |  |  |  |
| Fats/ Oils  1-serving |  |  |  |  |
| Other/ Extra  1-serving \*\*\*double your servings |  |  |  |  |