Grade 7 - NUTR-4 Nutrition 2020 Virginia SOLs



Description

Please see attached handout for a lesson submitted by a Virginia teacher

Handout

The next page includes a handout for the lesson.

Teacher: Heyden , Barnes	Date(s): 10/16-11/3/2017	
Grade Level or Course:6-8	Content or Unit: Nutrition	

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STAGE 1: Desired Results ~ What will students be learning?		
SOL/Learning Objective Specify the behaviors, conditions, and criteria. Indicate the verbs used in the Curriculum Framework. 6 Create 5 Evaluate 4 Analyze 3 Apply 2 Understand 1 Remember	6.2 The student will use knowledge of the body's structures and functions make sound decisions related to personal health. Key concepts/skills inclua) relationships of the United States Department of Health and Human Services Dietary Guidelines for Americans to personal eating habits; 7.2 The student will describe and exhibit the behaviors associated with a physically active and healthy lifestyles. Key concepts/skills include a) the effects of nutrition on daily performance; b) the importance of participatin in recreational and leisure activities; 8.3 The student will make choices that demonstrate an understanding of the relationship between nutrition and emotional and physical health. Key concepts/skills include a) causes and effects of compulsive behaviors, such eating disorders;	
	activities at an 85% proficiency.	
Key Concepts Refer to subject guide	Change, Relationships, Culture, Aesthetics	
Related Concepts Refer to subject guide	Energy, Movement, Environment, Choice, Balance	
Global context and explorations Choose one of the six global contexts and an explorations. See Principles into Practice, pages 60-64.	Identities and Relationships	
Statement of Inquiry Start with a conceptual understanding and then embed language from key and related concepts and global context.	The human body needs exercise to survive. After exercising our body begi to provide more energy, and we need to exercise to burn off excess calorie we take in.	
Learner profile connections (optional) What characteristic from the learner profile may apply?	Reflective- Students will be able to discuss the benefits of physical activity and explain how to increase their strength, endurance, and flexibility.	

Inquiry Questions

How will you address Essential Questions and introduce Big Ideas? Look for Essential Questions that are overarching or topical and help guide the unit plan. These questions promote conceptual thinking and add coherence to a series of lessons.

Factual – What is the importance of being able to read a nutrition label?

Conceptual – How does the food we convert into the energy our bodies use?

Debatable -- What are the most efficient ways to to create a meal plan? What do you think influences your age group's diets the most?

Calorie – a unit used to measure the energy or heat food supplies to the body Carbohydrates – nutrients that supply energy and help the body use

Carbohydrates – nutrients that supply energy and help the body use other nutrients; found in cereals, breads, grains

Digestion – process by which nutrients are changed chemically in the stomach and intestines into a form that can be absorbed into and used by the body

Fat - nutrient needed to supply stored energy; found in oils, butter, lard; the most calorically dense nutrient; provides body insulation

Minerals - nutrients that help build body structure and regulate many processes in the body; examples calcium, iron

Nutrient –the part of a food that is used by our bodies; examples; protein, fat, carbohydrates, vitamins, and minerals

Protein – the nutrient that builds and repairs body cells; helps form antibodies to fight infection

Vitamins - nutrients that are essential for body growth, resisting infection, and keeping the body function properly; examples are vitamin A,C,D, Niacin

Water - not a nutrient, but you can't live without it; needed to transport materials through the body, helps muscles move, keeps body tissues from sticking together and keeps the body cool.

Cholesterol – a type of fat produced in the body; too much can block arteries and lead to heart attack or stroke

Complex Carbohydrates – contained in foods such as beans, peas, nuts, seeds, fruits, and vegetables, and whole grain breads and cereals Energy - the capacity for doing work or supplying power Food - a nutrient source for both humans and animals

Polyunsaturated fats – tend to lower cholesterol levels; found in plant foods such as safflower, corn, sunflower, sesame, and soybean oils Saturated fats – tend to raise cholesterol levels; found in most animal products such as meats, butter, cheese, and some processed products such as margarine and mayonnaise

Key Vocabulary

Look for in the Curriculum Framework and other adopted resources.

Simple Carbohydrates – sugars, such as those in candy bars, which provide calories but few nutrients

Sugar - a simple carbohydrate found in foods like candy, soft drinks, sugar-coated cereals, cookies and ice cream; also called fructose, sucrose, dextrose, maltose, lactose

Salt - a mineral used to season food; should be used in moderation Additive – something that does not occur naturally in a food; something added often a preservative or coloring

Anorexia Nervosa – a dangerous, emotional disease in which a person wants to be very thin, loses appetite, and thinks about food all the time Appetite – a desire for food

Balanced Diet – enough, but not too much, of the right kinds of food Bulimia - a dangerous, emotional disease in which people eat enormous quantities of food in a very short time and then throw up or take laxatives to try to get rid of the food

Diet – a regulated selection of food and drink chosen for reason of health or weight control

Obesity – excess body fat

STAGE 2: Assessment Evidence ~ What is evidence of mastery?

IB Assessment Part 1

Start with the end in mind! Consider a performance task students will need to do as evidence of mastery of this objective and that allows students to show off their understanding of the Statement of Inquiry. Complete nutrition label worksheets on poptarts and oreos.

Complete Vocab organizer

IB Objectives: What assessment object will you address? A B C and/or D? Which strands of the criteria will you address? How does the task relate to the Statement of Inquiry?

A: This assessment is based off of foods that children in their age group often eat.

Reflection prior to teaching the unit: Possible misconceptions or learning gaps

Complete the above task yourself; think about what might be hardest for students to grasp? How will you make the rubric task specific? Students may find the words used in the definitions confusing. These hurdles can be jumped over by reviewing the worksheet as a class prior. The rubric will be based on their interpretation on the information provided by the nutrition label.

STAGE 3: Learning Plan ~ What are the strategies and activities you plan to use?

Snapshot / Warm-up

Activate prior knowledge and get students thinking about & motivated for today's lesson.

- Day 1: Name 5 foods that are healthy and 5 that are not.
- Day 2: What are your favorite foods and why?
- Day 3: Knowing what you know about nutrition, why do you think America's problem with obesity is growing more and more?

Instructional Strategies

Think in term of high yield strategies, such as:

- *Identifying similarities and* differences
- Summarizing and note taking
- Reinforcing effort and providing recognition
- Homework and practice
- Nonlinguistic representations
- Cooperative learning
- Setting objectives and providing feedback
- *Generating and testing* hypothesis
- Questions, cues, and advance organizers

Identifying differences and similarities between foods, and how to to pick the right one.

Summarizing and note taking with class notes from discussions.

Cooperative learning through group meal time activity.

Generating and testing hypotheses through writing down what they eat, and how much they exercise to determine how many calories they burn.

After learning how much sugar is in many of the foods they eat, students will do an experiment with a teaspoon, a mason jar, and a bag of sugar. They will each be given a card with a different favorite snack, and have to measure the teaspoons of sugar it contains.

Approaches to Learning (ATL)

skills: What skills will you teach and/or directly reinforce?

Communication skills Collaboration skills Self-management skills Organizational skills Affective skills Reflection skills Information/media literacy skills Critical thinking Creative thinking Transfer skills

What instructional strategies will you use to teach ATL skills?

Cooperative Learning Summarizing and note taking Identifying similarities and differences

Resources

What materials do you need to teach this unit? Consider texts, supplies, websites, visual aids, etc.)

Nutrition worksheets, Glencoe Teen Health textbook, 4 teaspoons, flashcards with snacks, 4 mason jars, 3 bags of sugar.

Include daily procedures, student activities, use of strategies, timeframe for activities, and daily student learning objective (SLO).

Teaching and Learning **Activities**

Plan for modeling, small or whole group instruction, and work stations. Include your examples, guided practice, problems or questions to pose, independent activities. It may help to think in terms of: "I do ..."

"We do..."

"Students do ..."

Day 1:

- SLO (2 min.)
- Snapshot (5 min.)

Topic: Nutrition Influences

- Instruction (15 min.) Teaching method: Lecture Brainstorming Whole group instruction
- Guided Practice: (15___ min.) Worksheet as a class
- Independent Practice (10___ min.)
- Daily assessment (5____ min.) activity
- Closing (5 min.)

Day 2:

- SLO (2 min.)
- Snapshot (5 min.)

Topic:

- Instruction (10 min.) Teaching method: Demonstration of how to measure the amount of sugar.
- Guided Practice: (15 min.)
- Independent Practice (__5_ min.)
- Students will complete a worksheet that contains different foods on it and based off what they know about reading nutrition label they will grade each.
- Daily assessment (_8_ min.) activity
- Closing (5 min.)

Differentiation

Include accommodations for individual learners and adaptations for groups of learners. Some ideas include:

- Flexible grouping
- Tiered instruction
- *Interest-based activities*
- Varied products
- Task cards
- Personal agendas
- Graphic Organizers

Tier 2 *S*1,*S*2,*S*3,*S*5*,*S*7,*S*8

> *Group work will be used* to complete the sugar activity, and doing graphic organizers for their vocabulary words. I will peak their interest by using information from foods that they eat often.

Higher Level Thinking

Plan for a challenging cognitive level, such as apply, analyze, evaluate, or create Tier 1: *S*4, *S*6, *S*9, *S*10, *S*14 Students can evaluate what activities they can do and how long have to do those activities to burn off their meals.

They can then create their own meal plan that is reasonable, and fits their lifestyle.

They can also work collaboratively to aid fellow students in their work.

Technology Use

How will you be incorporating technology?

Students will look up their favorite foods and their caloric values on their own devices.

Tier 3 S11*,S12*,S13*, S15,S16, S17*,S18*,S19* Students can also use their own devices to aid in the interpretation of words. This class contains 3 ESL students and 4 that are below their grade level in reading.

Interdisciplinary Connections to other subject areas and/or authentic applications

Reflect upon what people do in the real world with this content; and how it links to other disciplines.

Students can relate what they learn in these lessons to science, and history as they look into their own cultures as well as others. The science piece can be applied at the conversion of energy that the human body does on its own. There is also a math connection as students will need to add, multiply, and divide to figure out how many calories, and amount of sugar in their nutrition lahels.

Checking for **Understanding**

Check throughout the lesson using:

- *Question and Answer*
- Class discussions
- Group Response
- Demonstrations

• *Practice sheets* Quick Quizzes Practice sheets on reading nutrition labels. Test lab measuring sugar.

Reflection during teaching:

What do you notice that is going well? What causes students to struggle? What surprised you about this lesson?

The students were shocked to find out how much sugar they were taking in daily. They were also shocked at how many calories needed to be burned to lose 1 lb. The students struggled with the idea that there was such a thing as an empty calorie.

STAGE 4: Closu	re ~ What did the students master & wha	They had a hard time grasping that not all food is created equal t are they missing?
Assessment Part 2 Revisit Assessment Part 1. Plan a formative assessment which shows concretely what students mastered today. This might be: • Exit card • Short Quiz • Seatwork/Practice Sheet collected • Written response to a prompt Oral responses/participation	The worksheets I picked up from day 1 and 2, students did much better this time around, passing with an overall efficiency of 87% as opposed to the previous of 77%. They seemed to like the fact that I was using foods they can relate to. As I was observing their collaborative work they were leading each other on their own and developing their own hypotheses on what a healthy diet would consist of.	
Lesson Closure & Student Summarizing of their Learning Review what students learned or should have learned. Recognize gaps and allow them to help you plan for the next lesson(s).	Students seemed to really grasp the objective, and understand what influenced their diets. The only gap I could identify is the language that they understand. Many of my students are below grade level reading, and certain words like Influence, and availability, had to be explained in more detail. I was able to address this as I was walking through the class while they were doing their worksheets. They really enjoy me walking around and me working with them one on one.	

Reflection After Teaching: How effective was the learning? What needs to be adjusted before you teach this lesson again?

For some classes this lesson was great, these were the classes I was able to work one on one with more as their class size was small. To aid in the confusion on what some words mean I think in my larger classes having a dictionary available as well as an English to Spanish one for my ESL students. I have a students in each of my classes that speak fluent English and Spanish, and those students score in the top percentile and are eager to aid their classmates in translations. I find this very useful, but I what I do not want to happen is them to become dependent on someone translating for them all the time.