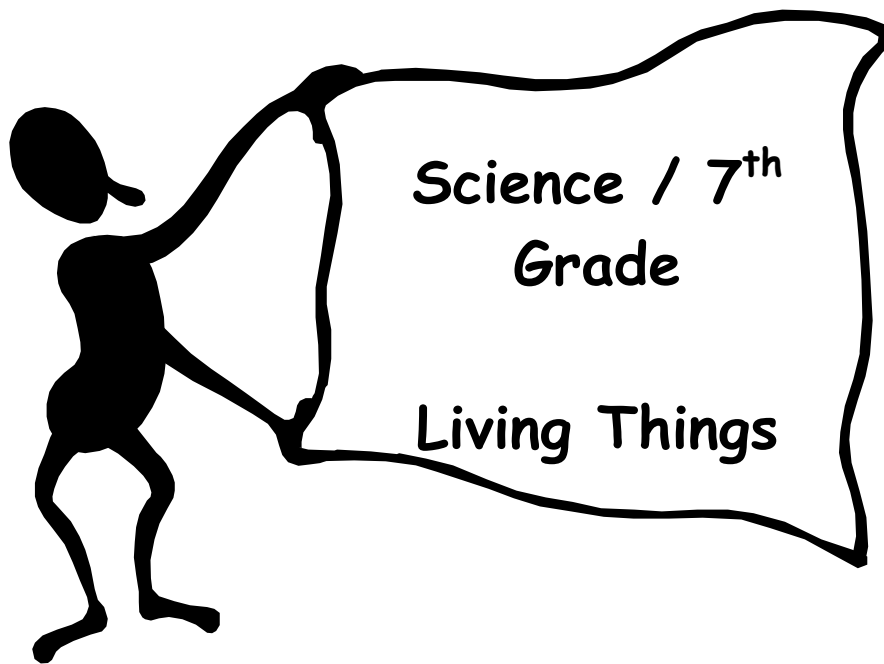


New York City Department of Education Magnet Program District 25 & 28

School Name

IS 237 – The Magnet School for the Arts



Essential Question: How do our habits affect our health?

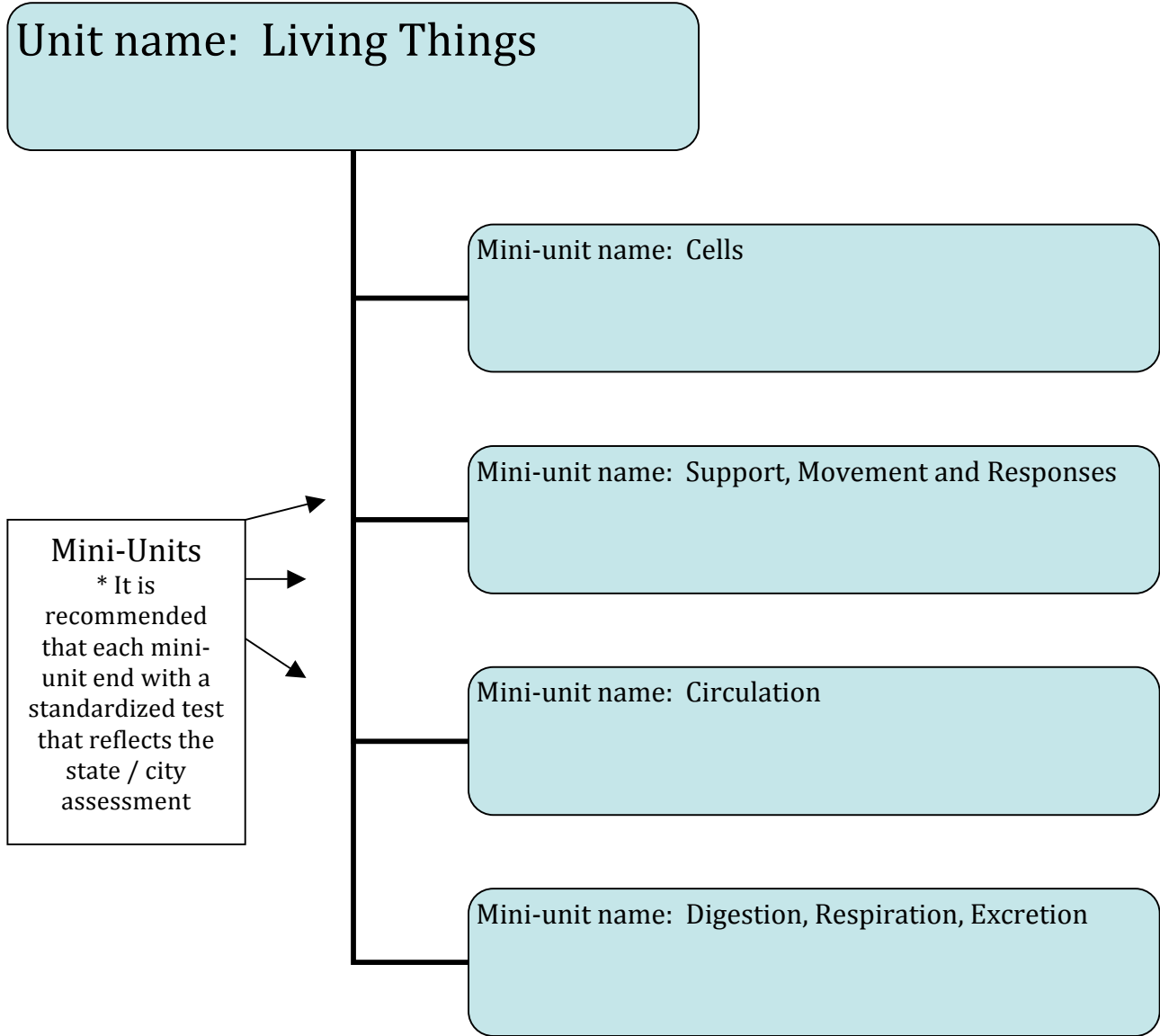
Suggested Time Frame: 4-6 weeks

Theme: Art

Graphic Overview of Unit

Suggested Time Frame: 4-6 weeks

Essential Question: How do our habits affect our health?



Unit's Culminating Project: (briefly explain in 2-3 sentences): Students will demonstrate their scientific knowledge of body systems by writing a dramatic scene and presenting an oral presentation depicting a situation where a friend has an unhealthy habit that affects his or her body system adversely.

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Stage 1- Desired Results	
<p><u>Standards-Based Learning Goals:</u> Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.</p>	
Concepts	
<p>Big Ideas for this Unit</p> <ul style="list-style-type: none"> • Structure • Balance • Interactions • Survival 	<p>Magnet School Theme:</p> <p>The Arts</p> <p>Relevant/Connected Big Idea:</p> <p>This connects to the magnet theme of the arts through the culminating project of writing a dramatic scene depicting the adverse effects of unhealthy habits on body systems.</p>
<p>Enduring Understandings Students will understand that</p> <ul style="list-style-type: none"> • Living things are both similar to and different from each other and from nonliving things.(key idea 1) • Organisms maintain a dynamic equilibrium that sustains life. (key idea 5) 	<p>Overarching Essential Question(s):</p> <ul style="list-style-type: none"> • How do human bodies function to maintain health?

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Content and Skills	
<p>Content Students will know...</p> <p>Levels of Organization</p> <ul style="list-style-type: none"> • Cells – structure and function • Tissues; organs; systems; organism <p>The Human Body</p> <ul style="list-style-type: none"> • Maintaining homeostasis: The human body systems <ul style="list-style-type: none"> – Digestive – Respiratory – Circulatory – Excretory – Skeletal and Muscular • Obtaining energy • Obtaining nutrients • Regulation of the internal environment • Metabolism • Responding to the external environment (Nervous system) 	<p>Skills Students will be able to...</p> <p>General Skills (from NYS Core Curriculum)</p> <ul style="list-style-type: none"> – Follow safety procedures in the classroom and laboratory. – Safely and accurately use the following measurement tools: <ul style="list-style-type: none"> - metric ruler - stopwatch (<i>for pulse rate</i>) - thermometer – Use appropriate units for measured or calculated values. – Sequence events. – Identify cause-and-effect relationships <p>Living Environment Skills (from NYS Core Curriculum)</p> <ul style="list-style-type: none"> – Manipulate a compound microscope to view microscopic objects (<i>look at different types of cells and tissues</i>). – Determine the size of a microscopic object using a compound microscope. --Interpret and/or illustrate the energy flow in a food chain, energy pyramid, or food web (<i>with regard to nutrients and calories</i>). – Identify pulse points and pulse rates. – Identify structure and function relationships in organisms.

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Stage 2- Summative Assessment Evidence

If students understand, know and are able to do the items in Stage 1, they should be able to show their understanding by completing an authentic task found in the world beyond the classroom.

➤ Design the Culminating/Summative Task:

G- (goal)

- Your goal is to write a dramatic scene depicting a friend who has some kind of unhealthy habit. You will present the scene along with an oral report that describes the body systems involved with this unhealthy behavior and resources for help in overcoming the unhealthy habit.

R- (role)

- You are a concerned student.

A- (audience)

- The audience is composed of your friends and classmates.

S- (situation)

- You are going to persuade your classmates about the benefits of quitting an unhealthy habit by creating a dramatic scene and delivering an oral report that depicts this unhealthy behavior.

P- (purpose and product)

- Some examples of unhealthy habits are smoking, eating fried foods, anorexia, drinking alcohol, lack of

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exercise, over eating, excessive time on computers.

- Identify the human body system that is affected by this unhealthy habit.
- Include a picture of a healthy and an unhealthy body system somewhere in your scene or oral report.
- Describe the structure and parts of that body system.
- Describe how the unhealthy habit is affecting the functioning of the body system.
- Explain the positive affects of quitting this habit.
- Provide the list of places where students can find help.

S- (standards for performance)

Your scene and report need to include.....

- A disease or an unhealthy habit.
- The body system(s) affected by the unhealthy habit.
- A picture comparing a healthy and unhealthy body system.
- The health benefits of quitting.
- A list of helpful links and resources.
- Dialogue and stage directions
- Evidence of rehearsal

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Student Task

In the space below, write the task exactly as students will see it.

You will write a dramatic scene depicting a middle school student who has an unhealthy habit that will adversely affect his or her body system. Some habits you may wish to portray are smoking, eating disorders, drinking alcohol, lack of exercise, over eating, or excessive time on computers. Your goal is to educate your classmates about the health risks of this unhealthy habit through the scene you create and an oral presentation you give afterwards.

Your presentation should include a dramatic scene that depicts the unhealthy habit, a description of the body system(s) affected, a picture comparing a healthy body system to an unhealthy body system, and helpful resources in quitting the habit.

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Rubric for Culminating Project

Understanding (60%)	Product (30%)	Presentation (10%)
<p>4 = High level of understanding that includes</p> <ul style="list-style-type: none"> • The description of the unhealthy habit. • Structures of the body system affected. • Functions of the body system affected. • How does the habit affect the body system? • Health benefits of quitting. • List of useful resources. 	<p>4 = Scene is extremely well organized and includes the following:</p> <ul style="list-style-type: none"> • Clear beginning, middle and end • Conflict relates to an unhealthy habit • Main idea is conveyed through dialogue and action • Relevant information is included • Engaging and interest grabbing 	<p>4 = Culminating presentation is characterized by highly effective attention to the needs of the audience such as</p> <ul style="list-style-type: none"> • Speaking slowly, clearly and loud. • Making eye contact with audience. • Using visual aids. • Engaging the audience. • Picture with a comparison of healthy and unhealthy body system.
<p>3 = Adequate level of understanding that includes 5 out of 6 items listed above.</p>	<p>3 = Most of the sections are fully developed and includes 4 out of 5 things.</p>	<p>3 = any three out of four things listed above.</p>
<p>2 = Incomplete level of understanding that includes at least 4 of the things listed above.</p>	<p>2 = Shows tendency towards engagement and highlights and includes only 3 out of 5 things.</p>	<p>2 = any two of the four.</p>
<p>1= Little evidence of deep understanding is demonstrated.</p>	<p>1= Scene is extremely superficial.</p>	<p>1= Shows evidence of less than 2 out 4 things.</p>

Stage 2- Formative Assessment Evidence

Throughout the unit how will you check to make sure students are mastering the knowledge, skills, and understandings they need to be successful at the summative/culminating task?

Assessment Formats on the State Test	Weekly Formative Assessments For Content...
<ul style="list-style-type: none"> • Multiple choice questions • Short responses 	<ul style="list-style-type: none"> • Multiple choice • Short answers

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<ul style="list-style-type: none"> • Lab performance 	
	<p>For Skills...</p> <ul style="list-style-type: none"> • Lab performance • Concept maps
	<p>For Understandings...</p> <ul style="list-style-type: none"> • Popsicle approach

Essential Question: How do habits effect our health?

structure organization interdependence (macro)	<ul style="list-style-type: none"> • Homeostasis • Knowledge (Skeletal, Muscular, Nervous and endocrine systems) 	<ul style="list-style-type: none"> • Identifying cause and effect. <p>What should the students be able to do? (rule of thumb - skills are verbs – knowledge is a noun)</p>	<p>How does this connect to the theme of your school</p>	<ul style="list-style-type: none"> • Explain how skin protects the body? Compare and contrast three types of muscles. <p>Possible List of Topical Essential Questions Focusing Questions</p>	<ul style="list-style-type: none"> • Multiple choice questions. • Oral presentations. <p align="center">Mini Unit Assessment</p>	E
organization interdependence organization survival	<ul style="list-style-type: none"> • Blood • Heart • Blood vessels • Organs • Systems • Organism 	<ul style="list-style-type: none"> • Sequencing • Use the flow of blood in the body. • Manipulate compound 		<ul style="list-style-type: none"> • Explain the functional differences between all parts of the heart? • Explain the differences between the circulatory systems 	<ul style="list-style-type: none"> • Multiple choice questions. • Oral presentations • Graphical organizer for cells, tissues, organs, 	
structure interdependence	<ul style="list-style-type: none"> • Respiration • Food 	<ul style="list-style-type: none"> • Identify the • Determine the 		<ul style="list-style-type: none"> • How do the circulatory systems 	<ul style="list-style-type: none"> • Organ system and presentations. 	

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Organization	nutrients <ul style="list-style-type: none"> • Metabolism • Total calorific value • Balanced Intake of nutrients 	pulse rates.		work together? <ul style="list-style-type: none"> • How many calories do you need to maintain a healthy body weight? 	
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