

# 5<sup>th</sup> Grade

Curriculum Milestones and Competencies



### 5<sup>th</sup> Grade International Baccalaureate Transdisciplinary Themes & Inquiry

#### Who We Are

An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; **human** relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human.

#### Inquiry

Plants and animals (including humans) have unique and diverse life cycles that include birth, growth, maturation, reproduction, and death.

### **How We Express Ourselves**

An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.

#### Inquiry

Media uses a variety of strategies to influence thinking.

## **How We Organize Ourselves**

An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.

#### Inquiry

Government systems influence the lives of individuals, and individuals can influence government systems.

#### Where We Are In Place and Time

An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives.

#### Inquiry

Ancient civilizations have shaped contemporary global communities.

#### **How the World Works**

An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.

#### Inquiry

Energy is converted, transformed, stored and used to support human progress.

# **Sharing the Planet**

An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.

#### Inquiry

Economic development leads to environmental challenges.





# ITALIAN | ITALIANO 50% instructional time

# Reading | Lettura

- Compare information presented in different texts in Italian
   Confrontare informazioni provenienti da testi differenti
- Collect information from various kinds of texts in Italian |
   Cogliere informazioni da testi di vario genere
- Express a personal opinion in Italian on texts read in Italian
   | Esprimere un parere personale personale sui testi letti

# Writing | Scrivere

- Develop stories through writing in Italian, including main ideas & accurate spelling | Produrre racconti scritti contenenti le informazioni principali e curando l'ortografia
- Express in writing, experiences, emotions and mood |
   Esprimere per iscritto esperienze, emozioni, stati d'animo
- Write texts in Italian that reflect diverse types and purposes | Scrivere testi di diverso genere (diario, lettera, racconto)

# Italian Language | Lingua Italiana

- Expand word knowledge and origin (etymology) using a dictionary | Ampliare il patrimonio lessicale usando il dizionario
- Understand the figurative meaning of words |
   Comprendere il significato figurato delle parole
- Recognize the structure of a standard sentence in Italian
   | Riconoscere la struttura di una frase minima

# Listening, Speaking and Presenting | Ascoltare, Parlare e Presentare

- Participate in class discussions in Italian expressing personal opinion | Partecipare a discussioni in classe per esprimere la propria opinione
- Retell experiences in Italian in a clear and logical structure and voice | Raccontare esperienze in modo chiaro e logico
- Formulate questions in Italian in response to what has been heard | Formulare domande pertinenti dopo l'ascolto





#### **ENGLISH** 50% instructional time

- Demonstrate phonics & word recognition, fluency when reading in English
- Communicate key ideas & details of autor, and craft & structure of text
- Develop integration of knowledge and ideas through text features - or in themes or characters throughout a series
- Extend range of reading & increase level of text complexity

## Writing

- Identify text types and purposes
- Participate in production & distribution of writing including use of varied technology tools
- Extend skills in research to build and present knowledge
- Actively expand range of writing

## English Language

- Demonstrate conventions of standard English
- Expand English vocabulary acquisition and use
- Develop knowledge of English language

## Listening, Speaking and Presenting

- Communicate comprehension and collaboration
- Participate in presentation of knowledge and ideas, including use of varied technology tools





#### **MATHEMATICS**

#### Number Sense

- Understand the place value system, including exponents
- Perform operations with multi-digit whole numbers and with decimals to hundredths
- Use equivalent fractions as a strategy to add and subtract fractions
- Apply and extend previous understandings of multiplication and division to fractions

#### Pattern and Function

- Write and interpret numerical expressions
- Analyze patterns and relationships
- Master mental math skills in addition, subtraction, multiplication and division

#### Measurement

- Convert like measurement units within a given measurement system
- Geometric Measurement: understand concepts of volume

# Shape and Space

 Graph points on the coordinate plane to solve real-world and mathematical problems

# Data Handling

• Collect, represent and interpret data





# HISTORY, GEOGRAPHY, SOCIAL STUDIES

Learning outcomes are from the Italian Ministry of Education Standards, Pollyanna Racial Literacy & California State Standards

## History

- Use sources of different nature for the reconstruction of historical phenomena.
- Represent, in a social and historical framework, the historical information that flows in the present from one's territory.
- Compare aspects characterizing the different societies studied, even in relation to the present.
- Obtain and produce information from graphs, tables, historical maps, iconographic findings, and consult texts of various kinds, both manual and non manual, paper, and digital.

# Geography

- Read historic geographic maps related to societies studied.
- Analyze the main physical characteristics of the territory, local and global facts and phenomena, interpreting geographical maps of different scales, thematic maps, graphs, digital elaborations, statistical reports related to socio-demographic and economic indicators.

#### Social Studies

- Humans are the only animals to build vast civilizations, and geography provided or denied the resources that allowed some groups of former hunter-gatherers to become farmers and herders and eventually develop some of the world's first civilizations.
- Students will explore the various engineering, technological, scientific, and mathematical innovations of such civilizations tracing cross-cultural patterns in order to develop a more informed and eclectic worldview enhancing their own cultural competency.
- A goal is for students to realize that humans of a given time and place created similar structures and/or inherited ideas to establish a common pattern that was dictated by geography.





# **SCIENCE** Learning outcomes are from the Next Generation Science Standards

## Energy

- Use evidence to construct an explanation relating the speed of an object to the energy of that object.
- Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.
- Ask questions and predict outcomes about the changes in energy that occur when objects collide.
- Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.
- Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

# Reproduction

- Organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.
- Reproduction is essential to the continued existence of organisms.
- The traits of organisms can be influenced by their environments.
- Plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.
- Puberty is the process of physical changes through which a child matures into an adult body capable of reproduction.





# **TECHNOLOGY**

<ul> <li>Coding</li> <li>Review Chromebook use</li> <li>Introduction to Tinkercad and 3-D Printing</li> </ul>	G-Suite  Introduction to G-Suite: Google Sites, Form & Maps
Digital Citizens  • PYP Exhibition (all aspects of Technology developed)	Computer Science  Review of Toddle PYP platform: Journal & Classroom
Robotics  • Introduction to "Sphero"	





# **ATELIER: ARTE**

"For students to explore and construct a sense of self and develop an understanding of the world around them." IB PYP

<ul> <li>Creating</li> <li>Communicate distinctive forms of meaning</li> <li>Develop technical skills</li> <li>Take creative risks</li> <li>Solve problems</li> <li>Visualize consequences</li> </ul>	Creative exploration through  Imagination  Experiences and knowledge of materials and processes  Making connections  Development of personal artistic journey
Responding      Critical analysis     Interpretation     Evaluation     Reflection     Communication	Understanding of      Concepts     Methods     Elements     Context     Perspectives





# **ATELIER: ENVIRONMENTAL STUDIES**

## Stewardship

- Care and respect for living things & their habitat in the garden
- Share limited garden resources
- Understand kinds of waste that are biodegradable

# Gardening

- Nature observation skills
- Growing and harvesting food
- Sifting and applying compost
- Handling and studying live decomposer species

# Ecoliteracy

- Understand the variety of ways humans use plants
- Understand the variety of ways humans rely on plants
- Understand the process of decomposition and composting in the garden
- Understand how other species use natural materials





# **ATELIER: MUSIC**

Performance  In-school performance  Goal of larger school-community performance in Spring	Independent practice  • Practice at home 3-4 times per week
<ul> <li>Percussion Instruments</li> <li>Intro to percussion technique on various instruments</li> <li>Basic rhythms (notes and rests)</li> <li>Intro to music on the Treble Staff</li> <li>Understanding roles and responsibilities</li> </ul>	Vocal Music  Varied styles Increased range Solo vs. Chorus Different Languages/Dialects
<ul> <li>Music Appreciation</li> <li>Exploration of composers' use of instruments</li> <li>Visiting Artists / Zoom</li> </ul>	Analysis  Identifying different components/functions





# PHYSICAL EDUCATION (PE)

# Concepts, principles, and strategies

- Collaboration
- Organized play
- Game design
- Athletic skill building and investigation,
- Mindfulness
- Self-awareness

# Motor skills and movement patterns

- Movement Concepts
- Body Management
- Locomotor Movement
- Manipulative Skills
- Rhythmic Skills
- Fitness Concepts
- Aerobic Capacity





# **SOCIAL EMOTIONAL LEARNING (SEL)**

Guided by the Collaborative for Academic, Social, and Emotional Learning (CASEL) Competencies

<ul> <li>Self-Awareness</li> <li>Identifying one's emotions</li> <li>Integrating personal and social identities</li> <li>Experiencing self-efficacy</li> </ul>	<ul> <li>Self-Management</li> <li>Managing one's emotions</li> <li>Setting personal and collective goals</li> </ul>
Social Awareness  Taking others' perspectives Identifying diverse social norms, including unjust ones	Relationships      Communicating effectively     Showing leadership in groups

# Responsible Decision Making

- Demonstrating curiosity and open-mindedness
- Recognizing how critical thinking skills are useful both inside & outside of school







"Our task, regarding creativity, is to help children climb their own mountains, as high as possible..."

Loris Malaguzzi

