Unit 5 (Cinco) - Science and Technology

Content Area: **World Language**
Course(s): **World Language: Spanish 4AP**
Time Period: **March**
Length: **25 Days, 11-12**
Status: **Published**

Title Section

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Spanish IV AP, 11-12

Science and Technology

Belleville Board of Education

102 Passaic Avenue

Belleville, NJ 07109

Prepared by: Spanish Teacher, Wendy Del Vecchio

Dr. Richard Tomko, Ph.D., M.J., Superintendent of Schools

Ms. LucyAnn Demikoff, Director of Curriculum and Instruction K-12

Ms. Nicole Shanklin, Director of Elementary Education K-8, ESL Coordinator K-12

Mr. George Droste, Director of Secondary Education

Board Approved:September 23, 2019

Unit Overview

Unit 5 - Science & Technology

Vocabulary and discussions regarding:

- The impact of science & technology in our daily lives
- Technological innovations
- Health & Medicine

Assign articles and Podcasts by topics (ciencia, tecnología, medio ambiente, salud, psicología) and share information learned in short oral presentations.

Review certain grammar rules

Enduring Understanding

Students will understand:

- Technology is used to communicate and collaborate in social, academic, and work environments
- Participation in a democratic and global society requires the ethical and responsible use of information and technology
- Working effectively and productively requires the selection and use of applications of technology systems that are appropriate for the task or desired outcome

Essential Questions

Students will keep considering:

- How do developments in science and technology affect our lives?
- What factors have driven innovation and discovery in the fields of science and technology?
- What role do ethics play in scientific advancement?
- How does technology change thinking?

Exit Skills

Students will be able to discuss:

- Access to technology / El acceso a la tecnología
- Effects of technology on the individual and society / Los efectos de la tecnología en el individuo y en la sociedad
- Health & Medicine / El cuidado de la salud y la medicina
- Technological innovations / Las innovaciones tecnológicas
- Science & Ethics / La ciencia y la ética

New Jersey Student Learning Standards (NJSLS-S)

WL.7.1.AL.A.2	Demonstrate comprehension of spoken and written language and nuances of culture, as expressed by speakers of the target language, in informal and some formal settings.
WL.7.1.AL.A.3	Analyze the use of verbal and non - verbal etiquette in the target culture(s) and in one's own culture to develop an understanding of how cultural perspectives are reflected in cultural products and cultural practices.
WL.7.1.AL.A.4	Evaluate, from multiple cultural perspectives, the historical, political, and present - day contexts that connect or have connected famous people, places, and events from the target culture(s) with the United States.
WL.7.1.AL.B.L.1.a	Infer meaning of unfamiliar words in new contexts.
WL.7.1.AL.B.L.1.d	Compare and contrast.
WL.7.1.AL.B.L.1.e	Offer and support opinions.

Interdisciplinary Connections

LA.W.11-12.6	Use technology, including the Internet, to produce, share, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
LA.SL.11-12.1	Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with peers on grades 11–12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
LA.L.11-12.2.B	Spell correctly.
LA.L.11-12.4.C	Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.
LA.L.11-12.5.A	Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text.
CAEP.9.2.12.C.5	Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.

Learning Objectives

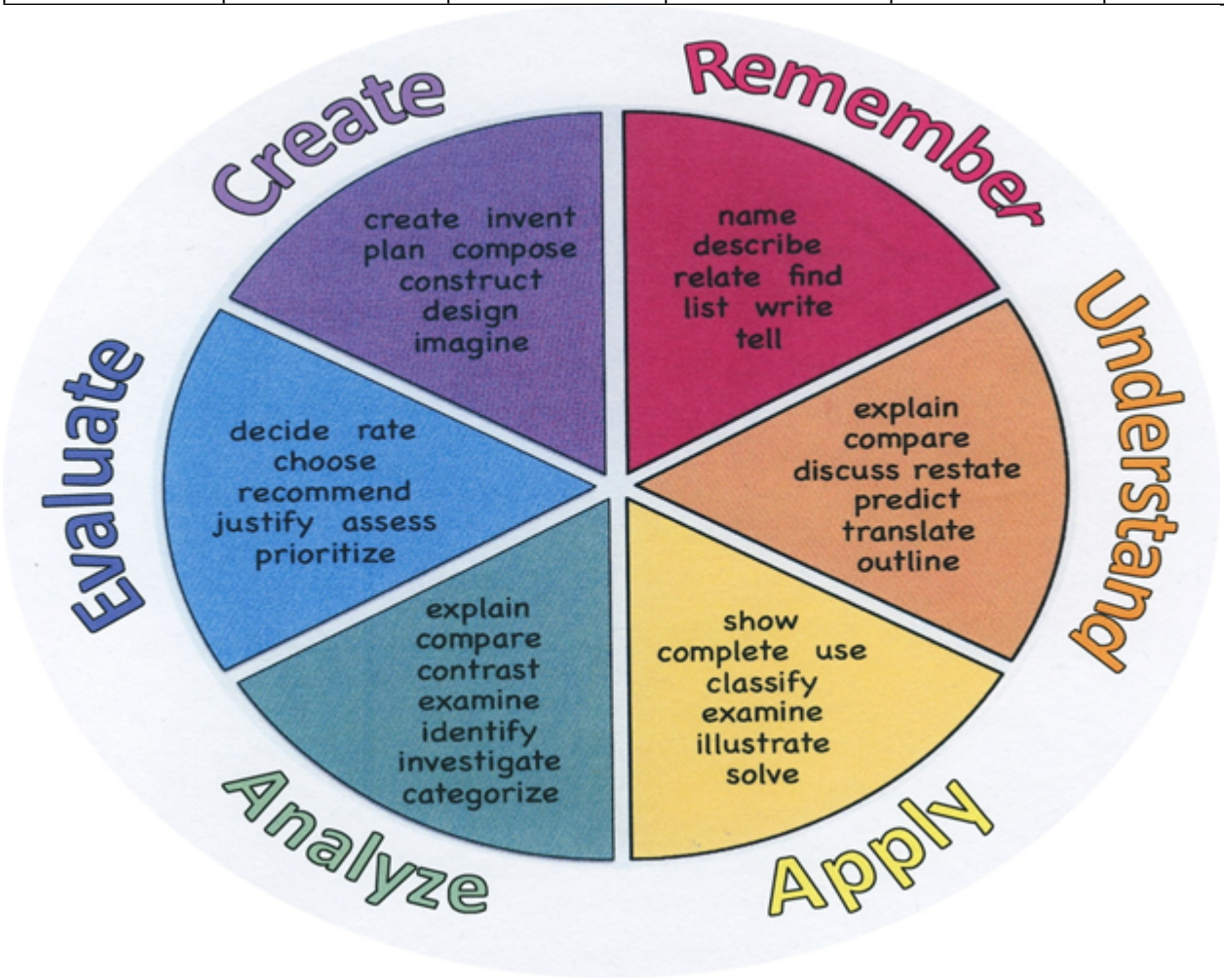
After completing this unit, students will be able to:

- **Read, Comprehend, Analyze**, and **Critique** written text and oral Languages
- **Understand** and **Apply** written and oral conventions to everyday interactions
- **Compare & Contrast** travel & transportation of France with those of the US
- **Recognize** and **express** feelings / opinions

Action Verbs: Below are examples of action verbs associated with each level of the Revised Bloom's Taxonomy.

Remember	Understand	Apply	Analyze	Evaluate	Create
Choose	Classify	Choose	Categorize	Appraise	Combine
Describe	Defend	Dramatize	Classify	Judge	Compose
Define	Demonstrate	Explain	Compare	Criticize	Construct
Label	Distinguish	Generalize	Differentiate	Defend	Design
List	Explain	Judge	Distinguish	Compare	Develop
Locate	Express	Organize	Identify	Assess	Formulate
Match	Extend	Paint	Infer	Conclude	Hypothesize
Memorize	Give Examples	Prepare	Point out	Contrast	Invent
Name	Illustrate	Produce	Select	Critique	Make
Omit	Indicate	Select	Subdivide	Determine	Originate
Recite	Interrelate	Show	Survey	Grade	Organize
Select	Interpret	Sketch	Arrange	Justify	Plan
State	Infer	Solve	Breakdown	Measure	Produce
Count	Match	Use	Combine	Rank	Role Play
Draw	Paraphrase	Add	Detect	Rate	Drive
Outline	Represent	Calculate	Diagram	Support	Devise
Point	Restate	Change	Discriminate	Test	Generate
Quote	Rewrite	Classify	Illustrate		Integrate
Recall	Select	Complete	Outline		Prescribe
Recognize	Show	Compute	Point out		Propose
Repeat	Summarize	Discover	Separate		Reconstruct

Reproduce	Tell Translate Associate Compute Convert Discuss Estimate Extrapolate Generalize Predict	Divide Examine Graph Interpolate Manipulate Modify Operate Subtract			Revise Rewrite Transform



Suggested Activities & Best Practices

Suggested Activities:

- Written comprehension activities;
- Reading comprehension activities;
- Oral practice;
- Interactive games;
- Integrate technology (e.g. Kahoot!, Escape Rooms, Seesaw, etc.)

Exemplar: Work collaboratively in pairs or groups to create, revise and present script on student choice unit topic in Seesaw video project.

Assessment Evidence - Checking for Understanding (CFU)

- Evaluation & Oral presentation rubrics
- Group activities
- "Do Now" activities
- Peer assessment

- Admit Tickets
- Anticipation Guide
- Common Benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- DBQ's
- Define
- Describe
- Evaluate
- Evaluation rubrics
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration

- Journals
- KWL Chart
- Learning Center Activities
- Multimedia Reports
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar
- Study Guide
- Surveys
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit review/Test prep
- Unit tests
- Web-Based Assessments
- Written Reports

Primary Resources & Materials

World Language Textbook Series

Ancillary Resources

- Current event articles
- Internet / Video clips
- Teacher-generated materials

Technology Infusion

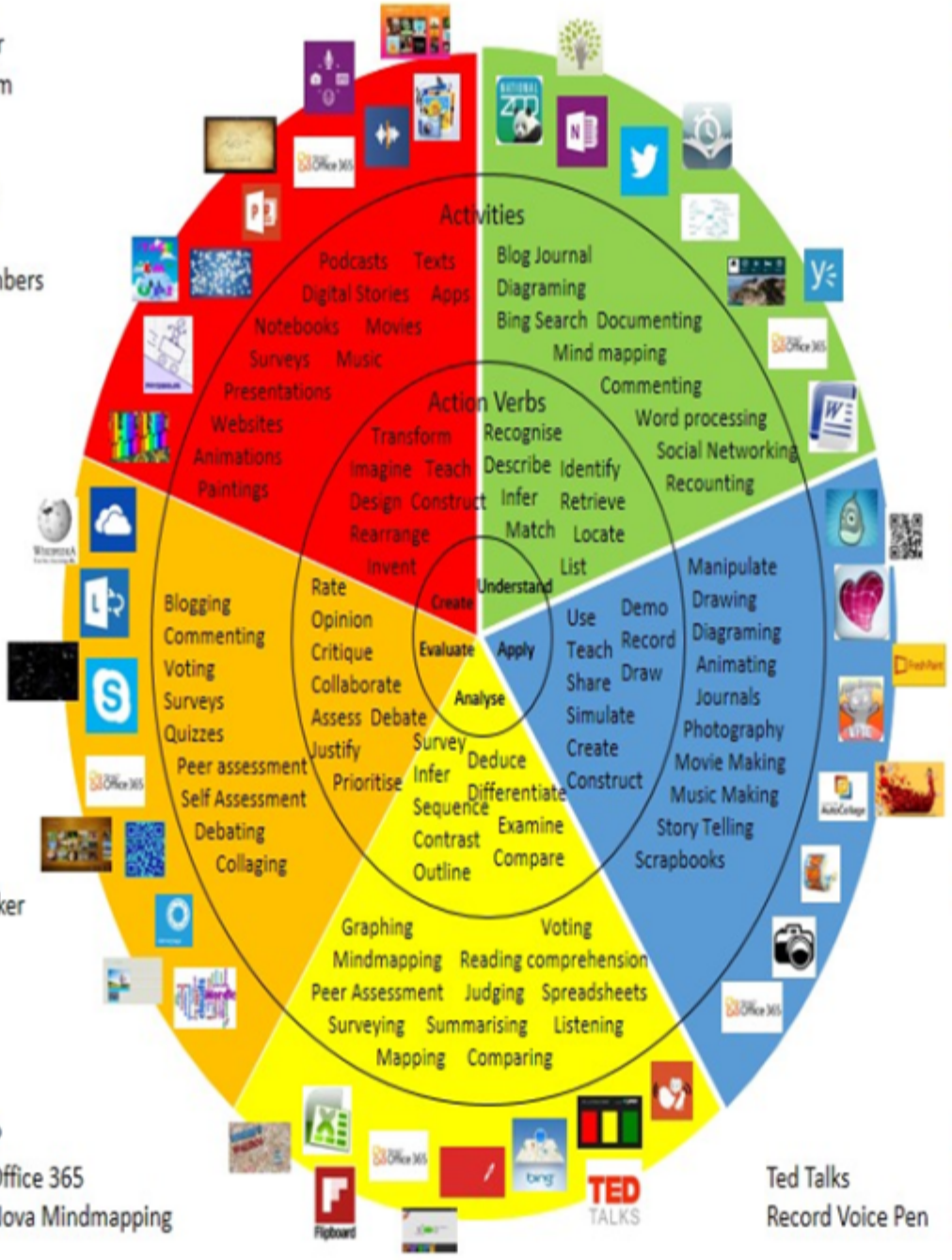
World language websites & resources are provided on Edlio class website and in class assignments like Google Classroom, SeeSaw, Kahoot, etc.

Exemplar: Create a 10-15 question Kahoot game using the vocabulary and grammar structures of their choice from the current unit to present to their peers during assessment reviews.

Win 8.1 Apps/Tools Pedagogy Wheel

Podcasts
Photostory 3
Kid Story Builder
Music Maker Jam
Paint A Story
Office 365
MS PowerPoint
Stack 'Em Up
NqSquared Numbers
Physamajig
Xylophone 8

Wikipedia
Skydrive
Lync
SkyMap
Skype
Office 365
Puzzle Touch
Easy QR
Memorylage
Life Moments
Word Cloud Maker



Where's Waldo?
MS Excel Office 365
Flipboard Nova Mindmapping

Ted Talks
Record Voice Pen

Originally taken from http://www.coetail.com/vzimmer/files/2013/02/iPadagogy-Wheel.001.jpg
And adapted for Windows 8.1 devices by Charlotte Beckhurst @CharBeckhurst

Alignment to 21st Century Skills & Technology

Mastery and infusion of 21st Century Skills & Technology and their Alignment to the core content areas is essential to student learning. The core content areas include:

- English Language Arts;
- Mathematics;
- Science and Scientific Inquiry (Next Generation);
- Social Studies, including American History, World History, Geography, Government and Civics, and Economics;
- World languages;
- Technology;
- Visual and Performing Arts.

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP11	Use technology to enhance productivity.
CAEP.9.2.12.C.5	Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.C.CS3	Develop cultural understanding and global awareness by engaging with learners of other cultures.
TECH.8.1.12.C.CS4	Contribute to project teams to produce original works or solve problems.

21st Century Skills/Interdisciplinary Themes

21st Century/Interdisciplinary Themes that will be incorporated into this unit:

- Communication and Collaboration

- Media Literacy
- ICT (Information, Communications and Technology) Literacy

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- ICT (Information, Communications and Technology) Literacy
- Information Literacy
- Life and Career Skills
- Media Literacy

21st Century Skills

Global Awareness

- Civic Literacy
- Environmental Literacy
- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness
- Health Literacy

Differentiation

General Differentiations:

- Pairing oral instruction with visuals
- Repeat directions
- Use manipulatives
- Center-based instruction
- Study guides
- Multisensory approaches
- Student(s) work with assigned partner

- Visual presentation
- Assistive technology
- Auditory presentations
- Small group setting

Hi-Prep Differentiations:

- Games and tournaments
- Group investigations
- Guided Reading
- Leveled rubrics
- Multiple intelligence options
- Project-based learning
- Stations/centers
- Tiered activities/assignments

Lo-Prep Differentiations

- Choice of activities
- Flexible grouping
- Goal setting with students
- Jigsaw
- Open-ended activities
- Think-Pair-Share
- Reading buddies
- Varied supplemental materials

Exemplar: Students engage in student choice project based learning to help explore and present understanding of current vocabulary and grammar skills in accordance with their own levels of knowledge.

Special Education Learning (IEP's & 504's)

-Provide modifications as dictated in the student's IEP/504 plan

-Additional time for skill mastery

-Student working with an assignment partner

-Check work frequently for understanding

-Extended time on tests/quizzes

-Multisensory presentation

Exemplar: Provide word bank on fill in the blank/recall assessments.

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length
- multi-sensory presentation
- multiple test sessions
- preferential seating
- preview of content, concepts, and vocabulary
- Provide modifications as dictated in the student's IEP/504 plan

- reduced/shortened reading assignments
- Reduced/shortened written assignments
- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

English Language Learning (ELL)

Not applicable to World Language.

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarif
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning;
- allowing students to correct errors (looking for understanding)
- allowing the use of note cards or open-book during testing
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using computer word processing spell check and grammar check features
- using true/false, matching, or fill in the blank tests in lieu of essay tests

At Risk

-Using videos, illustrations, pictures, and drawings to explain or clarify

-Tutoring by peers

-Having peers take notes or providing a copy of the teacher's notes

-Allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
Exemplar: Encourage attendance at before school/after school tutoring program to allow for added one on one review and instruction time.

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Talented and Gifted Learning (T&G)

-Create a plan to solve an issue presented in the class or in a text

-Cluster grouping

-Allow students to work at a faster pace
Exemplar: Allow students to create a lesson and teach the class using the medium of their choice as a teaching aid (Google slides, speech, SeeSaw activity or video)

- Above grade level placement option for qualified students
- Advanced problem-solving
- Allow students to work at a faster pace
- Cluster grouping
- Complete activities aligned with above grade level text using Benchmark results
- Create a blog or social media page about their unit
- Create a plan to solve an issue presented in the class or in a text
- Debate issues with research to support arguments
- Flexible skill grouping within a class or across grade level for rigor
- Higher order, critical & creative thinking skills, and discovery
- Multi-disciplinary unit and/or project

- Teacher-selected instructional strategies that are focused to provide challenge, engagement, and growth opportunities
- Utilize exploratory connections to higher-grade concepts
- Utilize project-based learning for greater depth of knowledge

Sample Lesson

Unit Name: Science & Technology

NJSLS: WL 7.1.IM.A.1, 7.1.IM.A.2, 7.1.IM.A.3, 7.1.IM.A.4, 7.1.IM.A.5, 7.1.IM.A.6 , 7.1.IM.A.7, 7.1.IM.A.8, 7.1.IM.B.4, 7.1.IM.B.5

Interdisciplinary Connection: NJSLSA.L3, NJSLSA.L5, NJSLSA.W4, NJSLSA.W5, 9.2.12.C.5

Statement of Objective: Students will be able to discuss & debate the topic of the effects of social media on society.

Anticipatory Set/Do Now: Quotation of the day based on daily website

Learning Activity: Students will prepare an oral presentation regarding the impact social media has had on their lives

Student Assessment/CFU's: Teacher observation; -Aural/Oral discrimination

Materials: Notebooks, Internet

21st Century Themes and Skills: Global Awareness, Civic Literacy

Differentiation: 1) Multisensory presentation format; 2) Lectures/drills coupled with graphic organizers and/or handouts

Integration of Technology: Explore websites pertaining to topic.