

D&T Overview MYP 4 grade 9										
unit no.	Unit title	Time	Key concept	related concept	global context	Statement of Inquiry	Objectives	ATL skills	Content	Resources
1	Space Exploration (interdisciplinary)	6 weeks 12 lessons 12 hours	Change	Adapting, Inventions	Scientific and Technical Innovation	Over time, space exploration helped change civilizations leading to the development of scientific and technological innovations.	INQUIRING AND ANALYZING	Research skills- information literacy, media literacy Thinking skills- critical thinking, creative thinking, Communication skills- communication	Developing Ideas → Discussing colours, pamphlet design, transparency. Layout structures of pamphlets. → What kind of inventions have been created through space exploration? → How can inventions be linked to science or mathematics? → What are the different issues in space? Space Colonization, Space Debris, etc...	Youtube Videos Powerpoint Slides NASA Website NASA Problem Chart www.canva.com
2	Coding 15-20 hours	Weeks 8 lessons 16 hours 15	Development /Creativity	Collaboration Adaptation	Personal and Cultural Expression	Through collaboration we develop and adapt creative codes to help us solve challenging problems.	A - Analyzing and Inquiring B - Developing Ideas C – Creating the solution D -Evaluating	Thinking Skills Collaboration Skill	Computer Science 2 (PYTHON) Conditional Statements (IF, ELSE) Nested Conditionals, Functions and events Checking expressions, executing default code, put one conditional into another conditional, saving code for later..	Textbook page reference additional resources

3	Business Unit	Weeks 8 lessons 16 hours 15	Development	Markets, Creativity	Scientific and Technical Innovation	In order to develop successful business, owners must analyze markets in a creative way.	A - ANALYZE AND INQUIRING B - DEVELOPING IDEAS C - CREATING THE SOLUTION	Thinking skills Communication Skills Research Skills	Company Name, Summary, Form of Ownership, Location, Marketing plan, Business Goals and Objectives. Why write a business plan? Researching your business plan(marketing, advertising, target population and competitors) Describing your vision and mission statement. Creating budgets for your startup costs. Using Canva to create our logos. Advertising - how will you advertise your company? Talking about newspapers, internet, television, etc... Global Context - how do we make our ideas sustainable and think about the environment?	Tech Twins Videos Powerpoint Slides Videos(Kahoot Game) https://create.kahoot.it/v2/details/94b25fe5-f90f-4560-a66b-0e71dece0a2c https://www.youtube.com/watch?v=Fqch50rUPvA (Business Plan)
4	3D Printing Masks	Weeks 8 lessons 16 hours 15	Creativity Identity Culture	Design Adaptation Perspective	Personal and Cultural Expression	Through Design we can use creativity to express the personal and cultural identities of various nations to show how they celebrate important festivals and rituals.	A - Analyzing and Inquiring B - Developing Ideas C – Creating the solution D -Evaluating	Communication Exchanging thoughts, messages and information effectively through interaction • Use intercultural understanding to interpret communication • Interpret and use effectively modes of non-verbal communication Research Finding, interpreting, judging and creating information	In this project students will research about a variety of cultures on different continents and from various times in history including current time. They will collect and analyze information about masks and the different uses and festivals where these would have been used. Students will also learn about 3D printing and how it works. They will have lessons on material, and how to operate a 3D printing program. Students will create their masks digitally and then we will 3D print them.	Textbook page reference additional resources

5	Inventions of the World	Weeks 5 lessons 10 hours 10	Creativity	Adapting Invention Innovation	Scientific and Technical Innovation	Innovative and creative products can be developed by adapting inventions.	A - Analyzing and Inquiring B - Developing Ideas C – Creating the solution D -Evaluating	Critical Thinking - Gather and organize relevant information to formulate an argument -Consider ideas from multiple perspectives -Identify obstacles and challenges -Troubleshoot systems and applications Creativity and Innovation: - Use brainstorming and mind mapping to generate new ideas and inquiries	Inventions/Innovation lesson Design Cycle in steps Identifying Problems How to research problems, and figuring out what are the issues. Developing Ideas How we can come up with creative and innovative ideas. Creating the solution How do we create feasible designs? Evaluating the Product How do we test? How to research technical solutions. Success and challenges of technical solutions. Adapting Inventions Presentations	Textbook page reference additional resources
4	The Legacy Movement	Weeks 5 lessons 10 hours 10	Perspective	Markets and Trends	Fairness and development	Researching markets and trends gives us new perspectives on our business plans	A - Analyzing and Inquiring B - Developing Ideas C – Creating the solution D -Evaluating	Research Skills Thinking Skills	What are markets? What are the trends? How are markets and trends related? Short Story: Market Research Analyst What do they do? What is their job? Building Business Plan: Executive Summary Company Description Market Analysis Organizational Chart Financial Chart Identifying the problem? What are you trying to solve? Who will your business help?	Textbook page reference additional resources

