Subject/Grade: Science, Social Studies, & ADST 6/7	Topic: Designing Sustainable Communities: Innovating for a Better Tomorrow SDG 11
Big Ideas:	**Essential Questions:**
Design can be responsive to identified needs (ADST 6) Earth and its climate have changed over geological time (Sci 7)	What global changes have been made towards SDG 11? How can I make personal sustainable changes that impact the global climate crisis? How does SG 11 impact my local community?
Learning Standard: Curricular Competencies	**Learning Standard: Content**
Science: Questioning & Predicting - Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest (Sci 6/7) Processing & Analysing data & Information - Apply First Peoples perspectives & knowledge (Sci 7) Evaluating - Consider social, ethical, and environmental implications of the findings from their own and others' investigations (Sci 7) Applying & Innovating - Contribute to care for self, others, community, and world through personal or collaborative approaches (Sci 7) **Socials:** - Short- and long-term causes and intended and unintended consequences of events, decisions, or developments (SS 6) **ADST:** - Construct a first version of the product or a prototype, as appropriate, making changes to tools, materials, and procedures as needed (ADST 6/7)	**Science**: - Evidence of climate change over geological time & the recent impacts of humans (Sci 7) **Socials Studies:** - International cooperation and responses to global issues (SS 6) - The urbanization and migration of people (SS 6)
I Can Statement(s)	

- I can demonstrate sustained curiosity about a problem of personal interest.
- I can demonstrate my learning through collaborating my ideas.
- I can recognize that there is global long- and short-term impacts of climate change.
- I acknowledge that there are many ways of knowing and working with climate change
- I can transfer my overall learning to recognize my personal impacts on climate change.
- I can create a prototype of a proposed solution.

Core Competencies

- I can communicate my ideas from a variety of sources and present the information.
- I can be aware of the impact of my decisions, actions, and footprint and advocate for change.

Assessment Evidence

Formative	Summative
- Discussions/Brainstorms - Sketch Notes	- Prototype presentation - Self-Assessment - Reflection

Lesson	Learning Intentions	Assessment F= Formative S=Summative	Materials
Hook 6 mins	The Curious Gardener Read Aloud	F=Sketch Notes/Inference	- The Curious Gardener

Learning Activities
60-90 mins per day
	Day 1
	Discussion on sustainable cities
	  - Explore SDG 11
	  - How does this build a healthier environment and improved quality of life?
	Brainstorm Urban Challenges
	  - Students spilt into groups to brainstorm on the whiteboard urban challenges to achieve SDG 11
	Group discussion
	  - Identify similarities of challenges each group came up with
	  - Split students into groups and assign an urban challenge. Have them try to identify the causes and impacts of the challenge and its connection to SDG 11
	
	Day 2
	Introduction to Design Thinking
	  - Key principles: empathy, define, ideate, prototype, and test
	  - Discuss the needs and perspectives of the community – make sure students keep this in mind
		F=discussion, Ideas generated, brainstorms	- Whiteboard markers
			- Laptop/internet
			- Paper
			- Writing instruments
			- Prototype materials (glue, cardboard, scissors etc.)

	Empathy - Students choose one urban challenge - Research the community to gain an understanding and the impact the challenges have on it Ideation - Groups brainstorm innovated ways to address their chosen urban challenge - Be creative, think outside the box Prototyping - Students create a prototype – does not need to be complex - Prepare a brief presentation – visual, podcast, poster, etc. **Day 3** Presentations - Groups present their proposed solution to the problem, explaining their innovative idea and prototype (invite other classes/admin or have presentations part of an assembly to share with a larger community) - Allow for questions/feedback		
Closure	- Students complete a self-assessment and reflection on the design thinking process and how they can apply this to future projects or real-world situations	S=Self-assessment & reflection	