Team Members: Duncan, Gareth, Catherine, Jaia, Donny, Gioia

Welcome to the

Innovation/Design Thinking

Centralizing Language/Curriculum Clarification Development Team

One of the outcomes from our most recent meeting together was the agreement to look at how to *clarify and centralize the language we use, both in Maker work and the larger curriculum development work.*

We can use this document to add some initial thinking. Below are a few tables to start our work.

Kindly let me know, via email, if you would be open to starting this work before the end of this calendar year (meaning that we would aim to meet during the week of June 7th), or if you would prefer to dip back into this work at the beginning of next year.

Thanks, Gioia

There are 3 tables below to start.

Table 1: Questions and answers (it is up to each division to decide)

Table 2: Suggestions/Examples

Table 3: Action and Accountability Chart

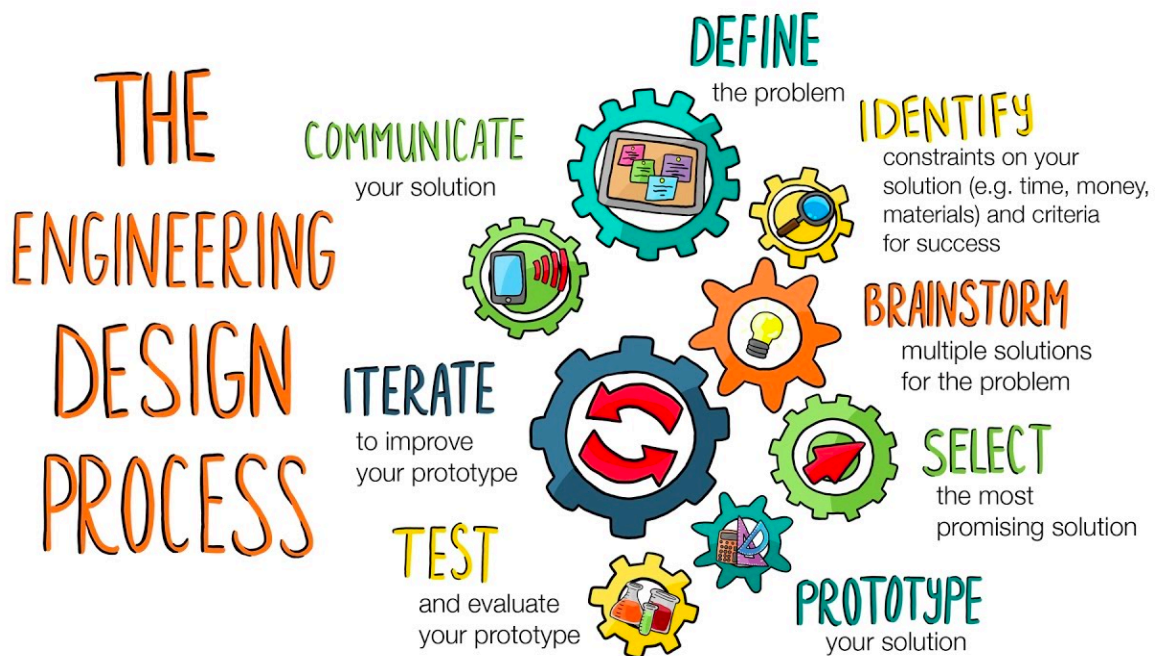## Table 1: Questions and answers (it is up to each division to decide.)

Question:	Comment / Question / Solution
Do we start with a common language format that we know of or create our own?	

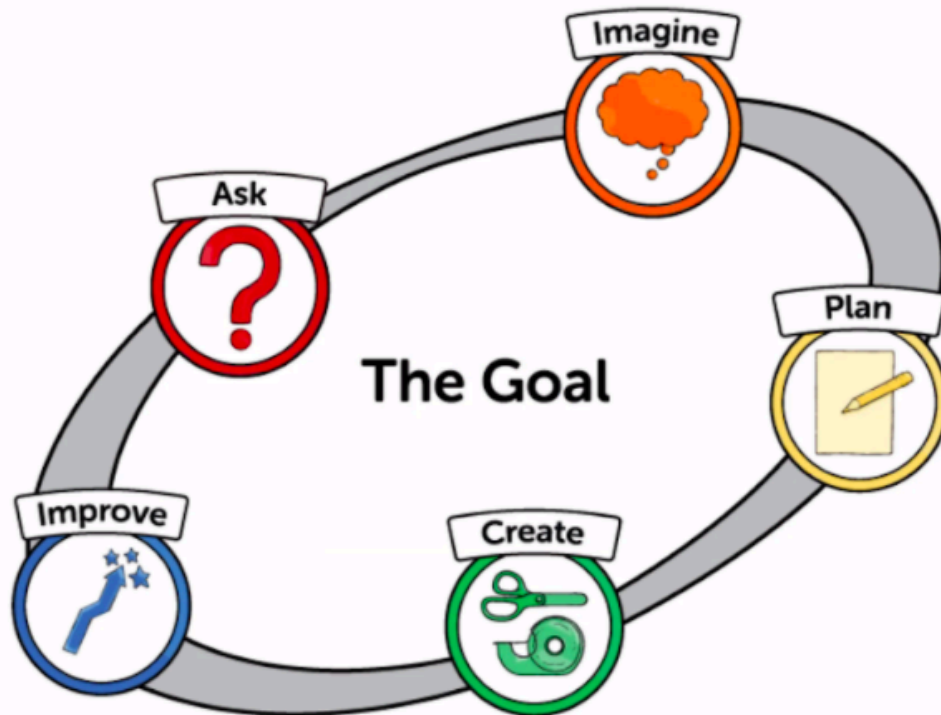| Do we want to want to divide up by the divisions?	

Table 2: Suggestions on curriculums/language use going forward. Please add any you have or researched.

From Where or Who	Example
Donny	A suggestion for a student-controlled process for gathering evidence of learning during the making/creation cycle at different grade levels P-1, 2-3, 4-5, 6-8, 9-12 Student-controlled process for gathering evidence of learning

Catherine Walton	Engineering Cycle examples
	
	For the Next Generation Science Standards the strand for engineering is called: **Engineering, Technology, and Applications of Science**. Below, the link I have attached uses the NSTA (National Science Teaching Association) vertical alignment view because the one on the official website is *very* cumbersome. So, here is the NSTA Break Down: NGSS Disciplinary Core Ideas for Engineering. You'll notice there are three substrands; each of these substrands are linked to the core ideas encompassing the substrand.
	
	NOW… those are NOT the actual standards
	
	 The *actual* standards (or performance expectations) are located here:
	
	    • K-2 Engineering Design
	    • 3-5 Engineering Design
	
	I hope this clarifies a little. I have been studying/working with the NGSS for about 6 years now, and have just begun to get a good handle on them as I work on the Elementary

science curriculum. So, if you have any questions please do not hesitate to call on me.

THE ENGINEERING DESIGN PROCESS

DEFINE the problem

COMMUNICATE your solution

IDENTIFY constraints on your solution (e.g. time, money, materials) and criteria for success

BRAINSTORM multiple solutions for the problem

ITERATE to improve your prototype

SELECT the most promising solution

TEST and evaluate your prototype

PROTOTYPE your solution

Engineering Design Process

Imagine

Ask

Plan

The Goal

Improve

Create

Gareth

https://www.computationalthinking.org/

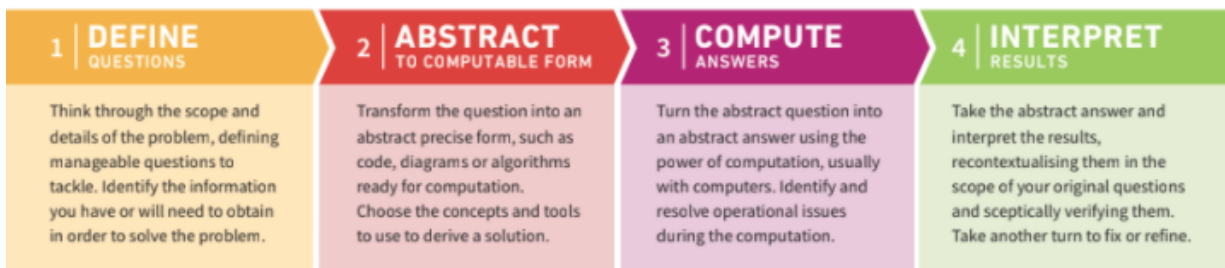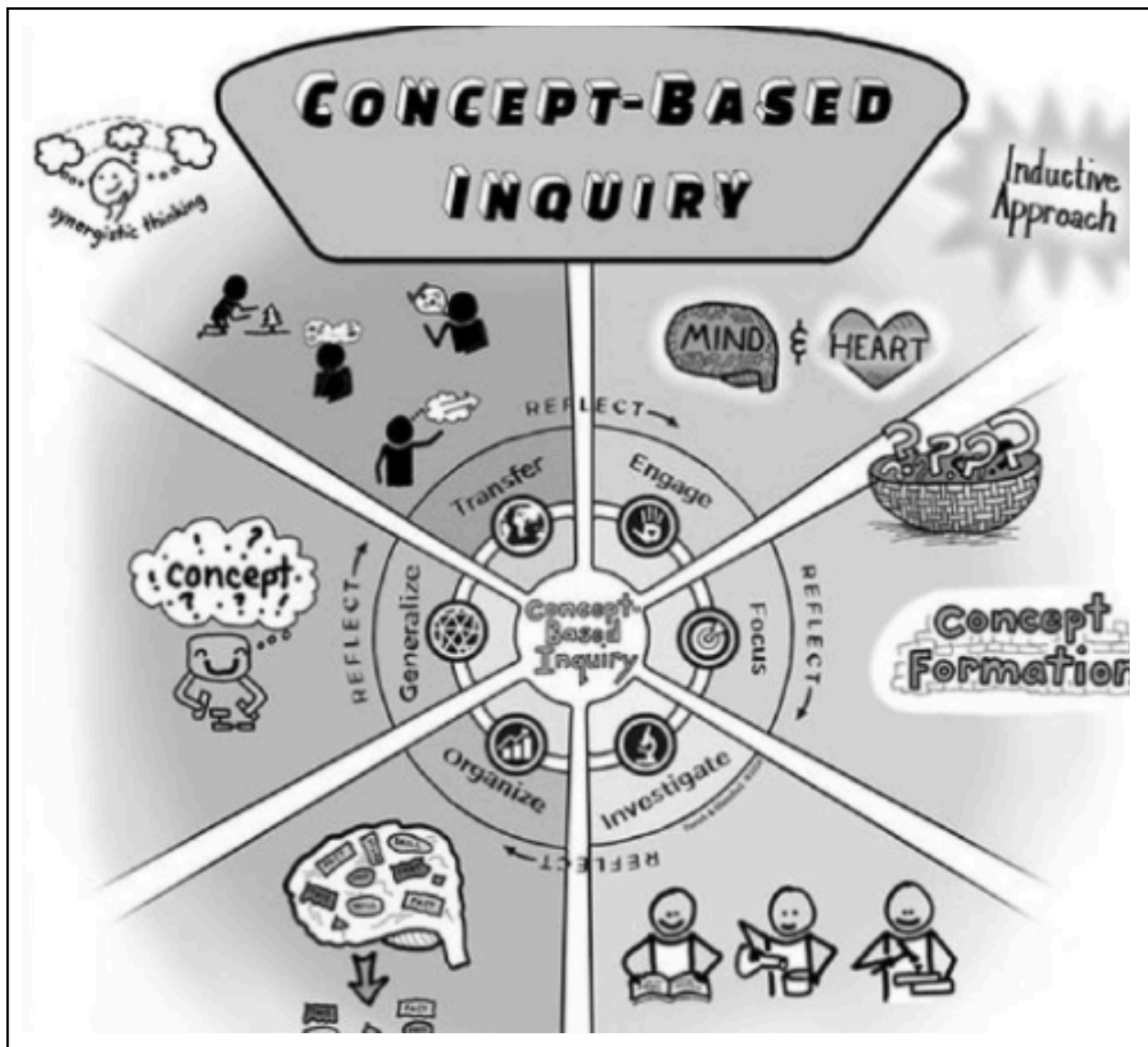| 1	DEFINE QUESTIONS	2	ABSTRACT TO COMPUTABLE FORM	3	COMPUTE ANSWERS	4	INTERPRET RESULTS
	Think through the scope and details of the problem, defining manageable questions to tackle. Identify the information you have or will need to obtain in order to solve the problem.		Transform the question into an abstract precise form, such as code, diagrams or algorithms ready for computation. Choose the concepts and tools to use to derive a solution.		Turn the abstract question into an abstract answer using the power of computation, usually with computers. Identify and resolve operational issues during the computation.		Take the abstract answer and interpret the results, recontextualising them in the scope of your original questions and sceptically verifying them. Take another turn to fix or refine.

Table 2: Action and Accountability Chart

Actions	Who
Decide when to call the group together to define next steps	Gioia - based on feedback from the group